DOCUMENT RESUME

ED 449 791 IR 020 556

AUTHOR Mitchell, Kevin, Ed.
TITLE Early Intervention: Expanding Access to Higher Education.
INSTITUTION ACCESS ERIC, Rockville, MD.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
REPORT NO NLE-2001-4405
ISSN ISSN-1065-1160
PUB DATE 2000-00-00
NOTE 45p.
AVAILABLE FROM ACCESS ERIC, 2277 Research Blvd., 7A, Rockville, MD 20850 (subscription is free; obtain back issues from EDRS). Tel: 800-538-3742 (Toll Free); e-mail: accesseric@accesseric.org; Web site: http://www.accesseric.org.
PUB TYPE Collected Works - Serials (022) -- ERIC Publications (071)
JOURNAL CIT ERIC Review; v8 n1 Fall 2000
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Access to Education; At Risk Persons; *Early Intervention; Educational Development; Educational Planning; Educational Practices; Elementary Secondary Education; *Higher Education; Intervention
IDENTIFIERS ERIC; National Library of Education DC

ABSTRACT

"The ERIC Review" announces research results, publications, and new programs relevant to each issue's theme topic. This issue focuses on early intervention and its role in making higher education accessible to all students, especially those who are traditionally underrepresented or at risk. An introductory section contains one article, "Access to Higher Education Today" (Adrianna Kezar). Section 1: Understanding Early Intervention, includes the following articles: "Promoting College Enrollment through Early Intervention" (Laura W. Perna); "Does It Work? Research on Early Intervention" (Adrianna Kezar); and "The Role of Early Intervention in Education Reform" (Watson Scott Swail and David Roth). Section 2: Supporting Early Intervention, contain two articles: "Sponsors of Early Intervention Programs" (Laura W. Perna, Robert H. Fenske, and Watson Scott Swail); and "College Summit" (Adrianna Kezar). Articles in Section 3: Practicing Early Intervention, include: "Identifying, Selecting, and Applying to an Early Intervention Program" (Ann S. Coles); and "Helping Your Child Prepare for College" (Jacqueline E. King). Section 4: Resources, includes two articles: "Early Intervention Resources" (Patricia Wood and Linda Schartman); and "Searching the ERIC Database on Early Intervention Topics" (Patricia Wood). The final article in the concluding section is "Putting It All Together: An Action Plan" (Adrianna Kezar). (Includes the ERIC directory.) (AEF)

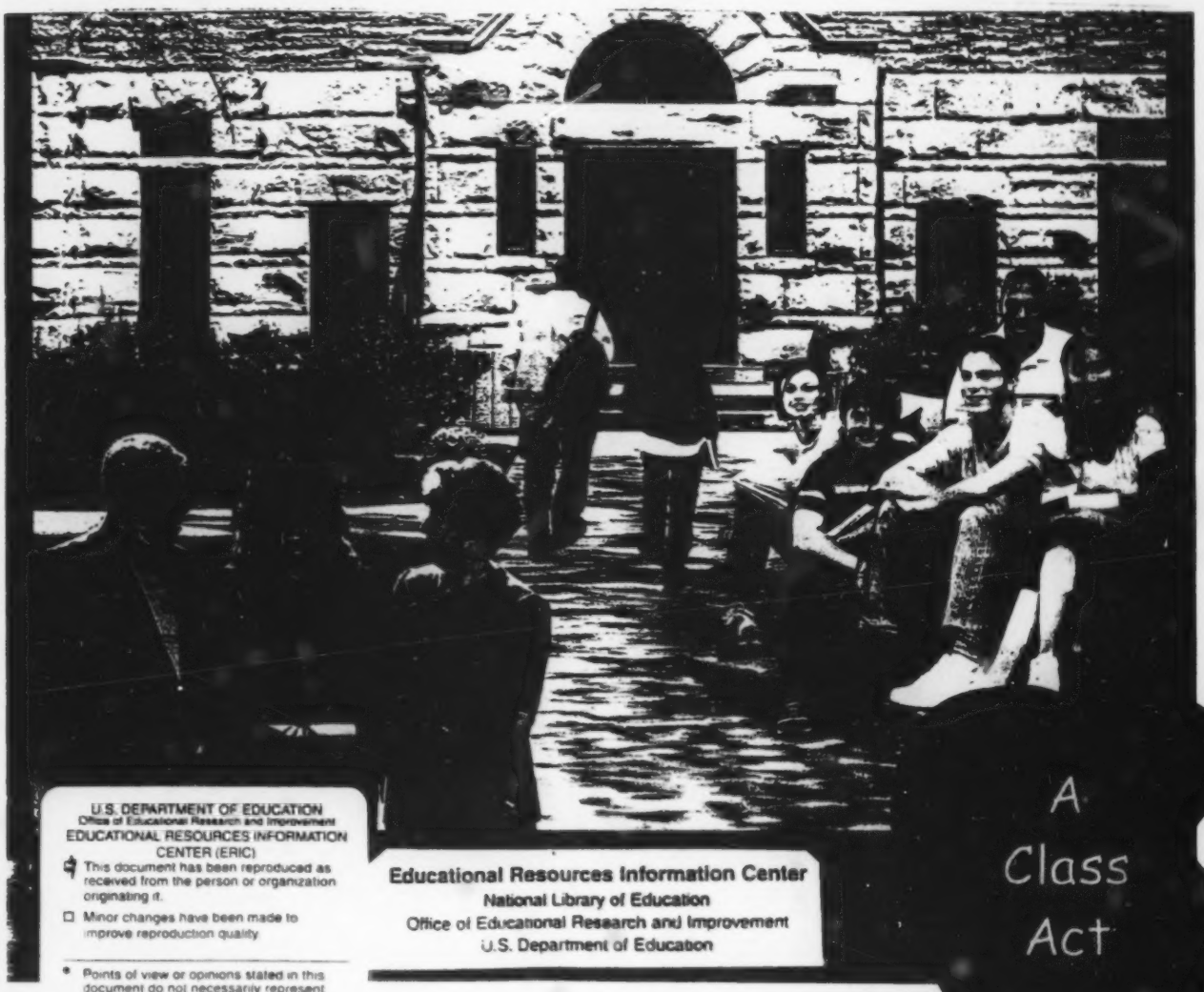
Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 449 791

THE ERIC Review

Volume 8 • Issue 1 • Fall 2000

EARLY INTERVENTION: EXPANDING ACCESS TO HIGHER EDUCATION



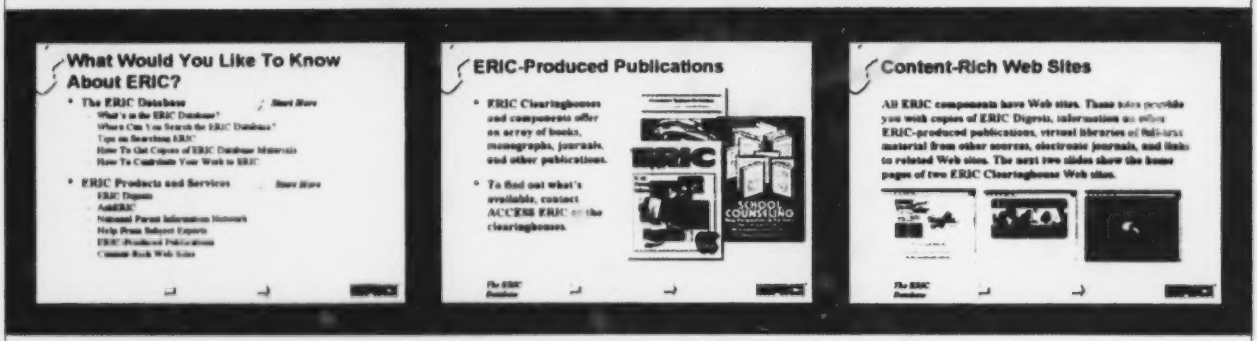
U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Educational Resources Information Center
National Library of Education
Office of Educational Research and Improvement
U.S. Department of Education

A Class Act

IR020556

ERIC® Slide Show



A Virtual Tour of the Educational Resources Information Center

Now there's a ***fast***, ***free***, and ***easy*** way to learn about **ERIC!** Check out the **ERIC Slide Show**. You can view the presentation on the Web or download it in Microsoft PowerPoint.

The slide show, like **ERIC**, is for teachers, parents, students, administrators, librarians—anyone interested in education.

In just a few minutes, you can

- Learn how to use the **ERIC** database—the world's largest database of education information.
- Discover **ERIC's** other products and services, including
  - Tips for parents and families.
  - Lesson plans for teachers.
- Learn about **AskERIC**—an e-mail service that will answer your education-related questions.

Take a virtual tour of ERIC today at www.accesseric.org/resources/eric_slides.html

Spread the word. . . .

You can use the ERIC Slide Show for a presentation or workshop. Here's how:

1. **Go to www.accesseric.org/resources/eric_slides.html.**
2. **Download the slides in Microsoft PowerPoint (Version 4.0 or Windows97).**
3. **Print out the script.**
4. **Use it to teach others about ERIC!**

Questions? Call ACCESS ERIC at 1-800-538-3742.

The Educational Resources Information Center (ERIC) is funded by the U.S. Department of Education and administered by the National Library of Education.

U.S. Department of Education
Richard W. Riley
Secretary

Office of Educational Research and Improvement
C. Kent McGuire
Assistant Secretary

National Library of Education
Luna Levinson
Acting Director

BEST COPY AVAILABLE

THE ERIC Review
Educational Resources Information Center

Contents

Introduction

Access to Higher Education Today
Adrianna Kezar 2

Section 1: Understanding Early Intervention

Promoting College Enrollment Through Early Intervention
Laura W. Perna 4

Does It Work? Research on Early Intervention
Adrianna Kezar 9

The Role of Early Intervention in Education Reform
Watson Scott Swail and David Roth 13

Section 2: Supporting Early Intervention

Sponsors of Early Intervention Programs
Laura W. Perna, Robert H. Fenske, and Watson Scott Swail 15

College Summit
Adrianna Kezar 19

Section 3: Practicing Early Intervention

Identifying, Selecting, and Applying to an Early Intervention Program
Ann S. Coles 20

Helping Your Child Prepare for College
Jacqueline E. King 24

Section 4: Resources

Early Intervention Resources
Patricia Wood and Linda Schartman 32

Searching the ERIC Database on Early Intervention Topics
Patricia Wood 37

Conclusion

Putting It All Together: An Action Plan
Adrianna Kezar 39

Editorial Board

Robert Thomas, ERIC Program, U.S. Department of Education, Office of Educational Research and Improvement, National Library of Education

Sandra Kerka, Associate Director for Database Development and Processing Coordinator, ERIC Clearinghouse on Adult, Career, and Vocational Education

Adrianna Kezar, Director, ERIC Clearinghouse on Higher Education

Stuart Smith, Associate Director, ERIC Clearinghouse on Educational Management

Garry Walz, Co-Director, ERIC Clearinghouse on Counseling and Student Services

The ERIC Review, published by ACCESS ERIC with support from the U.S. Department of Education's Office of Educational Research and Improvement (OERI), announces research results, publications, and new programs. It also contains information on the Educational Resources Information Center (ERIC), its subject-specific clearinghouses, and its support components. The ideas and opinions expressed in this publication do not necessarily reflect the positions or policies of the Department of Education or OERI.

For more information about ERIC or a free subscription to *The ERIC Review*, call ACCESS ERIC toll free at 1–800–LET–ERIC (538–3742).

ACCESS ERIC Director: Lynn Smarte
Managing Editor: Kevin Mitchell
Assistant Editor: Linda Schartman
Graphic Artist: Annie Pardo
Copy Editor: Bonnie Speary Devore
ISSN 1065–1160

Cover photos copyright 2000 PhotoDisc, Inc., and Digital Vision.

BEST COPY AVAILABLE

Introduction

Access to Higher Education Today

Adrianna Kezar

Why is *early intervention*—in this context, programs and other activities that help students prepare for postsecondary education[1]—such a great concern in our society today? Access to trade schools, community colleges, universities, and other forms of higher education is becoming increasingly important in the United States as economic, social, and political equity become more closely connected with academic achievement. Furthermore, national economic success and effective global competition depend on a highly skilled populace with the ability to fulfill job responsibilities in the new millennium. The most essential element of a democracy—an engaged populace—depends on education, which helps the public vote, organize, and develop policy effectively.

Yet certain groups are less likely to pursue postsecondary education and to receive its benefits. In particular, low-income students, first-generation students (those whose parents did not graduate from college), and underrepresented racial groups such as African Americans and Hispanics have difficulty finishing high school and continuing on to college (Fenske and others, 1997).

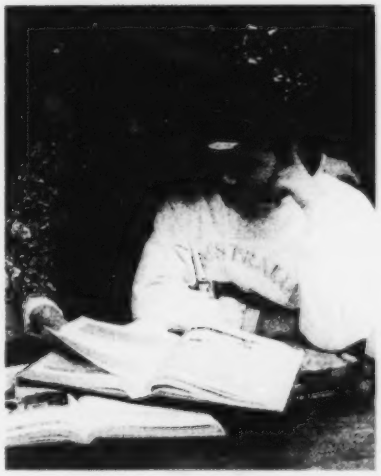
These conditions have led to a dialog among policymakers and community leaders about increasing access to postsecondary education. Parents and teachers are getting involved in this dialog as the relationship between postsecondary education and future opportunities becomes more apparent: College graduates, on average, earn 20 to 40 percent more money during their lifetime than students who do not attend college (Pascarella and Terenzini, 1991).

How can we increase access to postsecondary education for all students? This issue of *The ERIC Review* answers this question by highlighting the growing number of resources that are available to help students, parents, educators, and community leaders open the doors to higher education.

The following is an overview of what you will find in this issue.

Section 1: Understanding Early Intervention

Early intervention will be more successful if all members of the community are involved and understand why these programs are necessary. This section begins with "Promoting College Enrollment Through Early Intervention," which discusses the predictors of college enrollment and the factors that often prevent certain groups from going to college. Counselors and teachers may need to describe these barriers to the parents of disadvantaged students. Students and parents will find it easier to overcome barriers if they are aware of them. Higher education professionals can educate the constituencies they work with and enhance their



© 2000 Digital Stock

roles as program advocates and mentors of program students.

Teachers and administrators are often asked whether early intervention programs actually work. Students and parents wonder whether involving themselves in a program is worth their time and effort. College and university administrators wonder whether they should invest their outreach money in early intervention programs. "Does It Work? Research on Early Intervention" provides evidence of the positive effects of

Adrianna Kezar is Director of the ERIC Clearinghouse on Higher Education at The George Washington University in Washington, DC.

these programs in areas such as development of academic skills and college attendance. This information can help all readers understand and articulate the outcomes and importance of early intervention programs.

Finally, "The Role of Early Intervention in Education Reform" can help leaders in schools, communities, and colleges and universities envision a future direction for these programs based on systemic school reform.

Section 2: Supporting Early Intervention

A variety of organizations support early intervention programs, which in turn can vary widely. The incredible diversity of these programs can make learning about them challenging. But to effectively guide students into the appropriate programs, parents, counselors, and teachers need to know what the options are. Although no single directory of programs yet exists, "Sponsors of Early Intervention Programs" categorizes national, state, and local programs and describes several of these programs. In contrast, "College Summit" focuses on one program and highlights the importance of community partnerships in expanding access to higher education.

Section 3: Practicing Early Intervention

Parents, educators, and others can practice early intervention by helping students find an appropriate program. "Identifying, Selecting, and Applying to an Early Intervention Program" provides helpful hints and checklists that can benefit parents and students as well as educators. This article also includes several "Student Snapshots" that illustrate how early intervention programs benefit different types of students.

Parents can also practice early intervention by taking other steps to help their children prepare for college. "Helping Your Child Prepare for College" is especially significant because only 20 percent of eligible students are served by early intervention programs due to a lack of funding (Myers and Schirm, 1997). This article provides advice on saving for college, learning about financial aid, and helping children select appropriate middle and high school course work. The article also discusses other important aspects of the college-planning process, including personal motivation and family support, that can help children create future opportunities for themselves.

Included throughout this section are testimonials in which program participants discuss how to get the most out of an early intervention program. Students, parents, and educators can benefit from hearing firsthand about these experiences.

Section 4: Resources

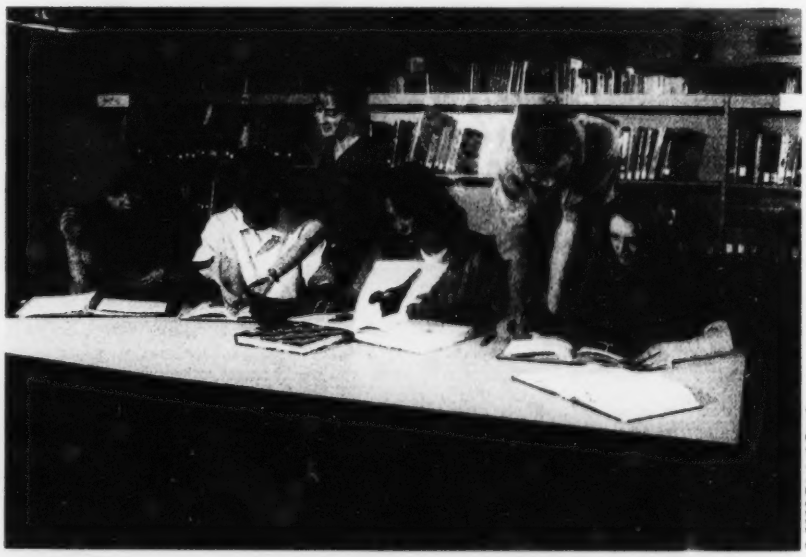
This section contains a valuable list of resources, including descriptions of national organizations, that can help readers find out more about early intervention programs. Many of the included programs, initiatives, and organizations are also discussed in sections 1, 2, and 3. In addition, this section provides information about searching the ERIC database on early intervention and related topics.

Conclusion

The issue concludes with steps that educators, parents, and community leaders can take to expand access to college for all students and steps that students can take to prepare themselves for college. I hope this issue of *The ERIC Review* will become an important resource for families and those who work with our nation's children.

Note

[1] Throughout this issue of *The ERIC Review*, the terms *postsecondary education*, *higher education*, and *college* are used interchangeably.



© 2000 Digital Stock

References

Fenske, R. H., and others. 1997. *Early Intervention Programs: Opening the Door to Higher Education*. ASHE-ERIC Higher Education Report, vol. 25, no. 6. Washington, DC: George Washington University, Graduate School of Education and Human Development.

Myers, D., and A. Schirm. 1997. *The National Evaluation of Upward Bound. The Short-Term Impact of Upward Bound: An Interim Report*. Washington, DC: Mathematica Policy Research; Atlanta, GA: Educational Testing Service; Rockville, MD: Westat; Houston, TX: Decision Information Resources.

Pascarella, E., and P. Terenzini. 1991. *How College Affects Students: Findings and Insights From Twenty Years of Research*. San Francisco: Jossey-Bass.

BEST COPY AVAILABLE

re early intervention programs really necessary? This section of "The ERIC Review" describes the ways that early intervention programs help promote college enrollment, reviews the research on program outcomes, and discusses the future of these programs in the context of systemic education reform.

Promoting College Enrollment Through Early Intervention

Laura W. Perna

For more than 30 years, the federal government has focused on increasing postsecondary educational opportunities for individuals and groups by providing students with financial aid to offset the costs of attendance. Although financial resources are important, policymakers, researchers, and other observers are increasingly concluding that merely making financial aid available to students is not enough to ensure equal educational opportunity for all students, particularly those who are economically and educationally disadvantaged (Gladieux, Astor, and Swail, 1998; Gladieux and Swail, 1998).

This article sets the stage for understanding early intervention by describing the ways in which such programs recognize and respond to the factors that promote college enrollment.

Predictors of College Enrollment

Not all students are equally likely to consider enrolling in college. Several factors influence the likelihood of enrollment, including socioeconomic status; education aspirations and plans; academic preparation and achievement; parental support and encouragement; encouragement from counselors, teachers, and peers; and knowledge and information about college costs and financial aid.

Socioeconomic Status

Students of higher socioeconomic status—a composite measure that reflects parents' level of education attainment, parents' occupational status, and family income—are more likely than other students to plan for postsecondary education and actually enroll in college (Hossler, Braxton, and

© 2000 PhotoDisc, Inc.

Laura W. Perna is an assistant professor in the Department of Education Policy and Leadership at the University of Maryland in College Park, Maryland.

Coopersmith, 1989; Kane, 1994; Kane and Spizman, 1994; Manski and Wise, 1983; Rouse, 1994). As reflected in the figure on this page, research shows that students who come from families with lower incomes are less likely than other students to realize their education plans (Hossler, Schmit, and Vesper, 1999; Perna, 2000b).

The federal government's traditional approach to increasing college access among low-income students has been to create financial aid programs. Research suggests that financial aid is an important predictor of college enrollment among high school graduates (Catsiapis, 1987) and college applicants (St. John, 1991), regardless of the type of aid—grant, loan, or work-study program (St. John and Noell, 1989). Low-income students and African-American students may be particularly sensitive to the availability of financial aid (Heller, 1998).

Early intervention programs typically serve students of low socioeconomic status. For example, some programs target students who live in public housing or whose family income is below a specific cutoff point, and other programs include financial assistance for college.

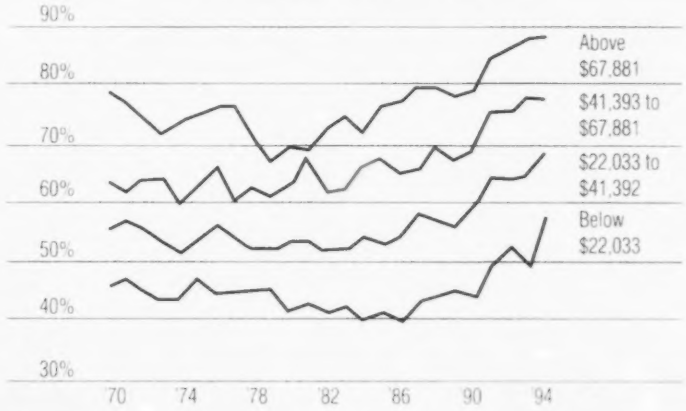
Education Aspirations and Plans

Research suggests that education aspirations and plans are important predictors of college enrollment (Hossler, Braxton, and Coopersmith, 1989; Perna, 2000a). Moreover, it appears that the higher the level of education expected, the more likely it is that the aspirations will be realized (Hossler, Schmit, and Vesper, 1999). These aspirations have been found to be influenced by such variables as socioeconomic status, academic achievement, and parental expectations (Hossler, Braxton, and Coopersmith, 1989).

Some researchers (for example, Adelman, 1999) have emphasized that education plans are a much more important predictor of college enrollment than education aspirations. It is important to remember that "plans" reflect a more realistic assessment of future behavior and a scheme for achieving the desired outcome, while "aspirations" reflect outcomes that are desired regardless of how realistic they are (Adelman, 1999). Other researchers (for example, Berkner and Chavez, 1997; Perna, 2000b) have shown that simply aspiring to attend college is not enough to ensure actual college enrollment. The consistency of aspirations also appears to be important, particularly with regard to bachelor's degree attainment (Adelman, 1999). For example, some research has shown that bachelor's degree attainment rates are higher for students who consistently report as high school sophomores and seniors that they aspire to complete at least a bachelor's degree than for those with less consistent aspirations (Adelman, 1999).

Early intervention programs may address the importance of education plans, including the consistency of education aspirations and the ways in which these aspirations are translated into education plans, in various ways. Some early intervention programs encourage students to believe that attending college is possible, and they educate students about the requirements for enrolling and succeeding in college by providing mentors and other role models. Early intervention programs may also sponsor visits to campuses so that students will envision themselves as college students, and they may require participants to engage in college-related activities such as applying for admission and financial aid.

College Participation Rates by Family Income Quartile for Unmarried 18- to 24-Year-Old High School Graduates, 1970 to 1994



Note: Income figures are 1994 dollars.

Source: *Postsecondary Education Opportunity* (Iowa City, Iowa: Thomas G. Mortenson, November 1995): 6.

Reprinted with permission from the *College Board Review*. Copyright © 1998 by College Examination Board. All rights reserved.

Academic Preparation and Achievement

Academic preparation and achievement are also important predictors of both predisposition toward attending, and actually enrolling in, a college or university (Bishop, 1977; Hossler, Braxton, and Coopersmith, 1989; Manski and Wise, 1983; Perna, 2000a; St. John, 1991; Hossler, Schmit, and Vesper, 1999).

Research has shown that college enrollment rates are higher among students who participate in academic or college preparatory curricular tracks in high school (Alexander and Eckland, 1974; Alwin and Otto, 1977; Thomas, 1980; Borus and Carpenter, 1984; Hossler,

Braxton and Coopersmith, 1989; St. John and Noell, 1989; Jackson, 1990; St. John, 1991; Altonji, 1992; Perna, 2000a). Nonetheless, Adelman (1999) concluded that *academic track* is an unreliable indicator of the quality and intensity of the high school curriculum because this term masks important variation within this broad category. For example, using the 1980 High School and Beyond study of high school sophomores, Adelman (1999) showed that 37 percent of high school graduates who had participated in an academic curricular track had not completed algebra II, and 33 percent had completed no more than eight credits in core academic subjects. At least part of these differences may be related to differences in the availability of high-quality courses across high schools (Adelman, 1999).

Research has also shown that the quality and intensity of the high school curriculum is among the most important predictors of both college enrollment and degree attainment (Adelman, 1999; Horn, 1997; Perna, 2000b). For example, research has shown that after controlling for other variables, taking at least one advanced mathematics course is associated with a higher probability of enrolling in a four-year college or university among students who are at risk of dropping out of high school (Horn, 1997) and among high school sophomores who report aspiring to earn at least a bachelor's degree (Perna, 2000b). Controlling for family background, aptitude, and participation in an academic curricular program, Altonji (1992) found that the number of years of postsecondary education completed increased with each additional year of high school science, math, and foreign language. Adelman (1999) found that the quality and intensity of the high school curriculum was a more important predictor of bachelor's degree completion than test scores or class rank, particularly for African-American and Latino students. Nonetheless, research also indicates that, on average, low-income students and minorities are less prepared for college than high-income students and white students (see the bar chart on this page).

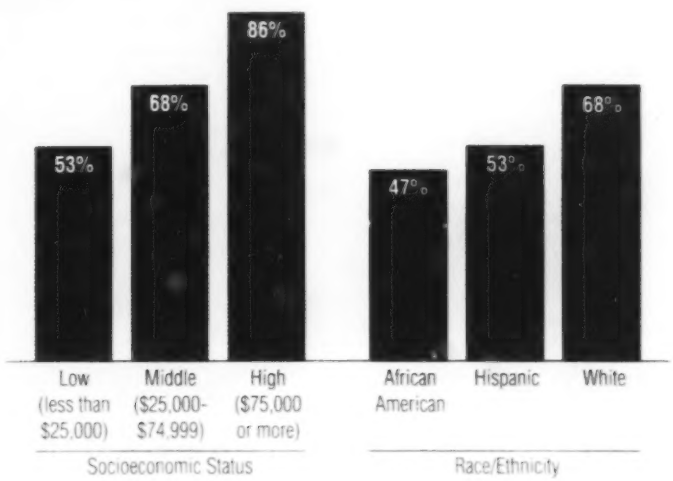
Early intervention programs may address the role of academic preparation and achievement in the college enrollment process by including preparatory, supplemental, accelerated, or college-level academic courses. Many early intervention programs offer tutoring or remediation in high school courses and activities designed to help students develop study and test-taking skills. Early intervention programs may also provide academic and career counseling to ensure that students are aware of their options and to help them make appropriate curricular choices during high school. Some programs may stimulate higher levels of academic achievement by requiring students to reach a minimum level of

Who Attends College?

Students are more likely to attend college if they

- Have high levels of socioeconomic status.
- Aspire and plan for higher education.
- Demonstrate academic achievement.
- Take rigorous academic courses.
- Have their parents' support and encouragement.
- Receive encouragement from counselors, teachers, and friends.
- Have accurate information about college, its costs, and the availability of aid.

Percentage of All 1992 High School Graduates Considered Qualified for College, by Income and Race/Ethnicity



Note: Four-year college-qualification index developed for the National Center for Education Statistics based on high school GPA, senior class rank, NELS 1992 aptitude test, SAT and ACT scores, and academic course work.

Source: *Access to Postsecondary Education for the 1992 High School Graduates* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1997), 29, Table 15.

Reprinted with permission from the *College Board Review*. Copyright © 1998 by College Examination Board. All rights reserved.

BEST COPY AVAILABLE

How Can Early Intervention Programs Help Promote College Enrollment?

Early intervention programs can

- Target students from low-income families—for example, by explaining the availability of financial assistance for college and offering scholarships and/or stipends.
- Help students see that college is a realistic option by providing mentors, encouraging campus visits, and offering support for college-related activities such as taking tests and filling out applications.
- Provide academic enrichment, remediation, tutoring, and/or study skills course work.
- Provide academic and career counseling and access to peers with similar goals.
- Involve parents in program activities to increase their level of knowledge about college and their ability to be supportive of their children.
- Provide families with facts about applying to college, attending college, and paying for college.

academic performance in order to receive financial assistance.

Parental Support and Encouragement

The amount of support and encouragement that parents give to their children influences both the decision to enroll in postsecondary education and actual postsecondary enrollment behavior (Hossler, Braxton, and Coopersmith, 1989; Hossler, Schmit, and Vesper, 1999). Some evidence suggests that parental support and encouragement is the most important predictor of students' planning to pursue postsecondary education (Hossler, Schmit, and Vesper, 1999). Parental support and encouragement can include parents helping their children with homework, participating in school activities, saving for their children's postsecondary education, visiting college campuses with their children, or attending workshops on financial aid with their children.

Early intervention programs may increase parents' capacity to support and encourage their children in planning and preparing for postsecondary education in various ways. Some programs work to educate parents about the advantages of postsecondary education and the availability of financial assistance. Other programs require parents to sign contracts promising that they will provide various types of assistance and will participate in particular program activities.

Encouragement From Counselors, Teachers, and Peers

High school counselors, teachers, and peers may play an important role in defining postsecondary education as an acceptable and viable option for students (Alexander, Eckland, and Griffin, 1975; Alwin and Otto, 1977; Falsey and Heyns, 1984; McDonough, 1994, 1997; Nolfi and others, 1978; Sewell, Haller, and Ohlendorf, 1970; Thomas, 1980). Support from counselors and teachers may shape students' actual postsecondary education decisions, such as the choice of college to attend (Hossler, Schmit, and Vesper, 1999). To a lesser extent, this support may shape students' education expectations or predisposition toward college.

Some research on the influence of peers on college enrollment shows that students are more likely to plan to attend college when their friends also plan to enroll in postsecondary education (Hossler, Schmit, and Vesper, 1999). Other evidence suggests that the influence of peers on student achievement may be greater than the influence of parents, particularly with regard to completing homework and getting good grades (Steinberg, 1996).

Early intervention programs may address the role of these "significant others" by identifying program staff and others as role models. Early intervention programs may also ensure that students receive appropriate academic and career counseling from program staff, counselors, and teachers to fully inform students with respect to their postsecondary education options. Some programs recognize the role of peer support in the college enrollment process by targeting services to an entire class.

Knowledge and Information About College Finances

Many studies show that parents and students overestimate college costs and lack accurate information and knowledge about financial aid (McColloch, 1990; Litten, 1991; Ikenberry and Hartle, 1998). In addition, after controlling for other factors related to college enrollment decisions, some research shows that students are less likely to enroll in college when their parents lack accurate information and knowledge about financial aid (Ekstrom, 1991; Higgins, 1984; Flint, 1993). After controlling for such factors as language spoken at home, parents' expectations for their children, and whether the parents had another child currently attending college, other research shows that parents with lower incomes and lower levels of education know less about various types of financial aid (Olson and Rosenfeld, 1984).

Early intervention programs may address the need for knowledge and more accurate information by offering workshops, seminars, and other activities designed to inform both students and their parents about college costs, college options, and the availability of financial aid.

BEST COPY AVAILABLE

Conclusions and Implications

The most commonly stated goal of early intervention programs is to increase college enrollment rates. The early intervention programs that will most effectively achieve this goal are those that include components aimed at addressing the range of factors that influence college enrollment behavior.

References

Adelman, C. 1999. *Answers in the Tool Box: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment*. Washington, DC: Office of Educational Research and Improvement, U.S. Department of Education. ERIC Document Reproduction Service No. 431 363.

Alexander, K. L., and B. K. Eckland. 1974. "Sex Differences in the Educational Attainment Process." *American Sociological Review* 39 (October): 668–82.

Alexander, K. L., B. K. Eckland, and L. J. Griffin. 1975. "The Wisconsin Model of Socioeconomic Achievement: A Replication." *American Journal of Sociology* 81 (2): 324–42.

Altonji, J. G. 1992. "The Effects of High School Curriculum on Education and Labor Market Outcomes." *Journal of Human Resources* 30 (3): 409–38.

Alwin, D. F., and L. B. Otto. 1977. "High School Context Effects on Aspirations." *Sociology of Education* 50 (4): 259–73.

Berkner, L., and L. Chavez. 1997. *Access to Postsecondary Education for the 1992 High School Graduates*. Washington, DC: Office of Educational Research and Improvement, U.S. Department of Education. National Center for Education Statistics Report No. 98–105.

Bishop, J. 1977. "The Effect of Public Policies on the Demand for Higher Education." *Journal of Human Resources* 12 (3): 285–307.

Borus, M. E., and S. A. Carpenter. 1984. "Factors Associated With College Attendance of High-School Seniors." *Economics of Education Review* 3 (3): 169–76.

Catsiapis, G. 1987. "A Model of Educational Investment Decisions." *Review of Economics and Statistics* 69 (1): 33–41.

Ekstrom, R. 1991. "Attitudes Toward Borrowing and Participation in Postsecondary Education." Paper presented at the annual meeting of the Association for the Study of Higher Education, Boston, Massachusetts, October 31–November 3, 1991. ERIC Document Reproduction Service No. 339 304.

Falsey, B., and B. Heyns. 1984. "The College Channel: Private and Public Schools Reconsidered." *Sociology of Education* 57 (April): 111–22.

Flint, T. A. 1993. "Early Awareness of College Financial Aid: Does It Expand Choice?" *Review of Higher Education* 16 (3): 309–27.

Gladieux, L. E., B. Astor, and W. S. Swail, eds. 1998. *Memory, Reason, Imagination: A Quarter Century of Pell Grants*. Washington, DC: College Board.

Gladieux, L. E., and W. S. Swail. 1998. "Financial Aid Is Not Enough: Improving the Odds of College Success." *College Board Review* (185): 16–21, 30–31.

Heller, D. E. 1998. "Student Price Response in Higher Education: An Update to Leslie and Brinkman." *Journal of Higher Education* 68 (6): 624–59.

Higgins, A. S. 1984. "Who Knows and Who Goes: Student Knowledge of Federal Financial Aid Programs and College Attendance." *Journal of Student Financial Aid* 14 (3): 19–26.

Horn, L. J. 1997. *Confronting the Odds: Students at Risk and the Pipeline to Higher Education*. Washington, DC: Office of Educational Research and Improvement, U.S. Department of Education. National Center for Education Statistics Report No. 98–094.

Hossler, D., J. Braxton, and G. Coopersmith. 1989. "Understanding Student College Choice." In J. C. Smart, ed., *Higher Education: Handbook of Theory and Research* (vol. V, pp. 231–88). New York: Agathon Press.

Hossler, D., J. Schmit, and N. Vesper. 1999. *College to College: How Social, Economic, and Educational Factors Influence the Decisions Students Make*. Baltimore, MD: Johns Hopkins University Press.

Ikenberry, S., and T. Hartle. 1998. *Too Little Knowledge Is a Dangerous Thing: What the Public Thinks and Knows About Paying for College*. Washington, DC: American Council on Education.

Jackson, G. A. 1990. "Financial Aid, College Entry, and Affirmative Action." *American Journal of Education* 98 (4): 523–50.

Kane, J., and L. M. Spizman. 1994. "Race, Financial Aid Awards, and College Attendance: Parents and Geography Matter." *American Journal of Economics and Sociology* 53 (1): 73–97.

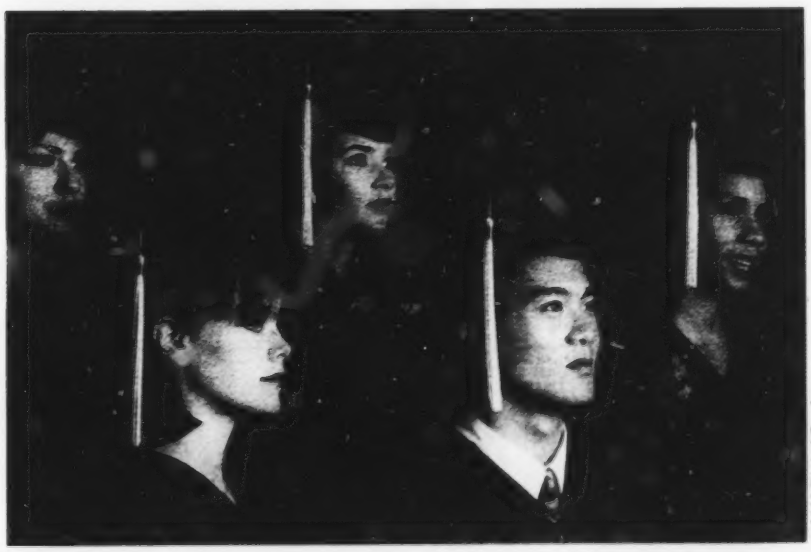
Kane, T. J. 1994. "College Entry by Blacks Since 1970: The Role of College Costs, Family Background, and the Returns to Education." *Journal of Political Economy* 102 (5): 878–911.

Litten, L. H. 1991. *Ivy Bound: High-Ability Students and College Choice*. New York: College Board.

Manski, C. F., and D. A. Wise. 1983. *College Choice in America*. Cambridge, MA: Harvard University Press.

McColloch, S. K. 1990. "The Financial Planning Gap." *Journal of College Admissions* (127): 12–17.

McDonough, P. M. 1997. *Choosing Colleges: How Social Class and Schools*



© 2000 Digital Stock

Structure Opportunity. Albany, NY: State University of New York.

McDonough, P. M. 1994. "Buying and Selling Higher Education: The Social Construction of the College Applicant." *Journal of Higher Education* 65 (4): 427–46.

Nolfi, G. J., and others. 1978. *Experiences of Recent High School Graduates: The Transition to Work or Postsecondary Education*. Lexington, MA: Lexington Books.

Olson, L., and R. A. Rosenfeld. 1984. "Parents and the Process of Gaining Access to Student Financial Aid." *Journal of Higher Education* 55 (4): 455–80.

Perna, L. W. 2000a. "Differences in the Decision To Attend College Among African Americans, Hispanics, and Whites." *Journal of Higher Education* 71 (2): 117–41.

Perna, L. W. 2000b. "Racial/Ethnic Group Differences in the Realization of Educational Plans." Paper presented at the annual conference of the American Educational Research Association, April 2000.

Rouse, C. E. 1994. "What To Do After High School: The Two-Year Versus Four-Year College Enrollment Decision." In R. G. Ehrenberg, ed., *Choices and Consequences: Contemporary Policy Issues in Education* (pp. 59–88). New York: IRL Press.

Sewell, W. H., A. O. Haller, and G. W. Ohlendorf. 1970. "The Educational and Early Occupational Status Attainment Process: Replication and Revision." *American Sociological Review* 35: 1014–27.

St. John, E. P. 1991. "What Really Influences Minority Attendance? Sequential Analyses of the 'High School and Beyond' Sophomore Cohort." *Research in Higher Education* 32 (2): 141–58.

St. John, E. P., and J. Noell. 1989. "The Effects of Student Financial Aid on Access to Higher Education: An Analysis of Progress With Special Consideration of Minority Enrollments." *Research in Higher Education* 30 (6): 563–81.

Steinberg, L. 1996. *Beyond the Classroom: Why School Reform Has Failed and What Parents Need To Do*. New York: Simon and Schuster.

Thomas, G. E. 1980. "Race and Sex Differences and Similarities in the Process of College Entry." *Higher Education* 9 (2): 179–202.

Does It Work? Research on Early Intervention

Adrianna Kezar

Editor's note: For more information about many of the early intervention programs discussed in this article, see "Early Intervention Resources" on page 32.

Is there any evidence that early intervention programs actually work? And if so, which type of program works best? Can discussing college, visiting a campus, receiving mentoring, and having parents learn more about what it means to go to college actually improve the odds that disadvantaged students will go to college? These are some of the questions this article attempts to answer.

Although early intervention may intuitively sound like a good way to increase college attendance, it is important to test this assumption with research and evaluation. Research and evaluation can also provide information about ways to improve programs.

There are two different types of research conducted on early intervention programs: program evaluation studies and national studies. Program evaluations are rare—few programs have been examined, and only the largest TRIO program, Upward Bound, has received much attention. In addition, few national studies have been conducted, but a national study of the Upward Bound program is currently in progress.

Research on early intervention programs has been hindered by several factors, including a lack of funding; the small size of most programs; and program diversity with respect to goals, services, eligibility criteria, and types of sponsors. Consequently, little comprehensive and reliable data related to program outcomes exist, and variation in program characteristics makes it difficult to generalize research results. Yet, despite these problems, preliminary research suggests that participation in early intervention programs can substantially enhance disadvantaged students' ability to attend college by influencing many of the factors that promote college enrollment.

This article examines the effect of early intervention programs on students' expectations about attending college, parents' expectations about their children's attending college, course selection in high school, development of academic skills, high school GPA and college entrance examination scores, high school retention and graduation rates, knowledge of postsecondary options, knowledge of admissions

Adrianna Kezar is Director of the ERIC Clearinghouse on Higher Education at The George Washington University in Washington, DC.

BEST COPY AVAILABLE

procedures, financial aid awards, college enrollment rates, and college retention and graduation rates. The article also discusses current knowledge related to the type of program that works best, future directions for research, and limitations of early intervention programs.

Program Effects

Students' Expectations About Attending College

Many studies show that one of the most significant barriers to the pursuit of postsecondary education is the inability of students to imagine themselves in college (Coles, 1992). Early intervention programs excel at removing this barrier. For example, a study of eighth graders suggests that students enrolled in early intervention programs have higher expectations about attending college than those who are not enrolled in a program (Mayer, 1991). The study also suggests that students in these programs have more self-confidence, which can lead to other positive outcomes. The latest study of Upward Bound also provides evidence that students enrolled in early intervention programs have higher expectations of going to college (Myers and Schirm, 1997). In addition, research suggests that the longer a student participates in a program, the higher his or her expectations about attending college will be (Farrow, Kaplan, and Fein, 1977). However, these studies did not examine the actual number of students that went on to college. Future research needs to examine whether expectations turn into reality.

Parents' Expectations About Their Children's Attending College

Parents play a significant role in their children's expectations for attending and succeeding in college, especially with respect to the enrollment of moderate- to high-risk teens in postsecondary education (Horn and Chen, 1998). The latest study of Upward Bound suggests that parental expectations increase when children with low expectations enroll in the program (Myers and Schirm, 1997). Students are more likely to enroll in postsecondary education when their parents have high education expectations for them (Horn and Chen, 1998).

Course Selection in High School

One of the most significant predictors of college enrollment and success is the completion of rigorous academic course work during middle and high school. With respect to disadvantaged students, this may be the most significant predictor (Horn and Chen, 1998; Adelman, 1999). Past studies and the latest Upward Bound study provide evidence that students in early intervention programs tend to take more rigorous course work than their counterparts who are not enrolled in programs (Myers and Schirm, 1997). In addition, the Upward Bound study found that the program has a positive effect on the number of academic courses that students take (Myers and Schirm, 1997). For example, Upward Bound students tend to take more science, math, English, foreign language, and social studies courses than students not enrolled in the program (Myers and Schirm, 1997).

Development of Academic Skills

Academic skill development is closely related to taking more rigorous course work. Several studies show that early intervention programs focusing on study skills teach students the basic reading, writing, mathematical, and thinking skills necessary to complete more rigorous course work (Farrow, Kaplan, and Fein, 1977).

Some studies also illustrate that programs that include academic skills components help students improve their grades, making access to college easier. For example, a study of the Oklahoma Higher Learning Access Program illustrates that, on average, students enrolled in the program have higher grade point averages than students not enrolled in the program (Oklahoma State Regents for Higher Education, 1998).

High School GPA and College Entrance Examination Scores

At this point, it is unclear whether participation in early intervention programs affects a student's grade point average (GPA) in high school. Some evaluation studies have found that higher GPAs are associated with participation in particular programs, but the national outcomes study of Upward Bound did not find that the program affected GPAs (Jung and Applied Systems Institute, 1984; Moore and others, 1997).

Upward Bound places a heavy emphasis on preparing students for college entrance examinations. However, there is currently minimal evidence about the program's effect on these scores, which are key to college admissions. This effect will be examined in the ongoing Upward Bound study (a six-year study), and a report should be available in 2001.

High School Retention and Graduation Rates

A primary goal of early intervention programs is keeping disadvantaged students in high school (Muraskin, 1997). Some programs have been shown to increase high school retention and graduation rates (Muraskin,

© 2000 PhotoDisc, Inc.

1997). Overall, however, there is mixed evidence about whether program participation has a positive effect on high school graduation rates (Farrow, Kaplan, and Fein, 1977; Jung and Applied Systems Institute, 1984).

Knowledge of Postsecondary Options

Most studies show that early intervention programs inform students about postsecondary education (Silva and Kim, 1998), including the different types of institutions, admissions requirements, sources of financial aid, and approaches to examining college choices (Coles, 1992). In some early intervention programs, parents also receive information about college choices. Evaluation studies suggest that early intervention programs might also enhance parents' interest in obtaining higher education for themselves (Silva and Kim, 1998).

Knowledge of Admissions Procedures

Impact studies show that students enrolled in early intervention programs have the skills, tools, and understanding to complete college applications, supply financial aid information, and negotiate other admissions processes that have been barriers to college attendance in the past (Burkheimer, Riccobono, and Wisenbaker, 1979). In addition, problems that students typically encounter in the admissions and financial aid processes are more likely to be resolved when students are enrolled in early intervention programs (Coles, 1992).

Financial Aid Awards

Many studies show that students in early intervention programs receive larger initial financial aid packages than comparison group members also attending college (Farrow, Kaplan, and Fein, 1977; Jung and Applied Systems Institute, 1984; Myers and Schirm, 1997). Early intervention students apply in greater numbers for financial aid, and the aid they receive is more often in the form of grants than loans (Levine and Nidiffer, 1996).

College Enrollment Rates

An important study that evaluated many different types of early intervention programs found that students at risk who participate in high school early intervention programs are nearly twice as likely to enroll in a four-year college as those who do not participate (Horn and Chen, 1998). Students in early intervention programs are also more likely to be chosen by their first- or second-choice school than students in comparison groups, and they are more likely to attend four-year institutions, more selective institutions, and institutions with TRIO programs (Burkheimer, Riccobono, and Wisenbaker, 1979).

Evaluations of specific early intervention programs, including TRIO (federally funded programs that include Upward Bound and Talent Search), reveal that college enrollment rates for program participants are generally very high—from 60 percent to 90 percent, depending on the program and region (Silva and Kim, 1998). A study conducted by the Council for Opportunity in Education found that Upward Bound students are four times more likely to earn undergraduate degrees than students from similar backgrounds who do not participate in TRIO programs (Silva and Kim, 1998). The study also showed that Upward Bound students are more likely to enroll in four-year institutions than two-year institutions (Silva and Kim, 1998). A national study of Talent Search in 1990 found that 73 percent of Talent Search students went on to college (cited in Silva and Kim, 1998).

Students who participate in the "I Have a Dream"® (IHAD) Program also show remarkable outcomes with respect to college attendance (Levine and Nidiffer, 1996). Before entering IHAD, the participants had an anticipated dropout rate of 75 percent and were not expected to attend college (Levine and Nidiffer, 1996). After completing IHAD, all of the participants finished high school, and approximately 50 percent completed at least two years of college (Levine and Nidiffer, 1996).

College Retention and Graduation Rates

Limited information exists regarding the effect of early intervention programs on college retention and graduation rates (Jung and Applied Systems Institute, 1984). This stems, in part, from the difficulty associated with identifying the specific effects of the college environment on these rates (Myers and Schirm, 1997).

Which Programs Work Best?

Because early intervention programs are so diverse, research results do not necessarily indicate which programs, or specific program components, work best. However, some evaluation studies do suggest that program diversity is critical. Although there has been no large-scale study to support this assertion, information is forthcoming. Most of the research results described in this article were derived from studies that were conducted on the most comprehensive early intervention programs. Comparative studies of high-involvement and low-involvement programs are needed to determine which programs work best.

Limitations of Early Intervention Programs

Some limitations of early intervention programs have been noted in previous research. One area—systemic change within schools—is not addressed by most programs. For example, some critics suggest that most existing early intervention programs are too costly and serve too few students. This criticism has led to the development of GEAR UP, a federal program that focuses on systemic change by targeting schools rather than individual students. The hope is that GEAR UP will have a larger effect on creating opportunities for all students.

Some critics also suggest that dropout rates associated with early intervention programs are too high. Dropouts often do not become part of program

evaluations, so problems within programs are sometimes overlooked.

Future Directions for Research

Although some research currently exists, further research on the effect of early intervention programs is needed. For example, some studies suggest the need for early intervention programs that target students before they reach the high school years, the current focus of most programs (Levine and Nidiffer, 1996), but further research could provide insight into the effects of program implementation in grade 6 versus grade 8 or 9. Research is also needed to find ways to prevent students from dropping out of early intervention programs (for example, structuring the programs so they do not interfere with students' ability to hold an afterschool job). Another important issue for future research is a comparison of program costs and outcomes. More research in this area could guide policy decisions and help optimize funding.

Conclusion

Although research on early intervention programs is only preliminary, it does suggest the important role such programs play in decreasing the high school dropout rate, increasing college attendance, preparing students for more rigorous course work, helping students develop supplemental study skills, increasing financial aid awards for college, and raising students' expectations about attending college. Although these are the strongest results, there may be many other positive effects that have yet to be discovered.

References

Adelman, C. 1999. *Answers in the Tool Box: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment*. Washington, DC: Office of Educational Research and Improvement, U.S. Department of Education. ERIC Document Reproduction Service No. ED 431 363.

Burkheimer, G., J. Riccobono, and J. Wisenbaker. 1979. *Final Report: Evaluation Study of the Upward Bound Program—A Second Followup*. Research Triangle Park, NC: Research Triangle Institute.

Coles, A. 1992. "Perspectives on an Evaluation of Talent Search: Interviews With Talent Search Staff." Commissioned paper presented at the Design Conference for the Evaluation of the Talent Search Program, Washington, DC, September 30, 1992.

Farrow, E., L. Kaplan, and B. Fein. 1977. *Long-Term Impact of the Rutgers Upward Bound Program on Its Participants*. New Brunswick, NJ: Rutgers University.

Horn, L., and X. Chen. 1998. *Toward Resiliency: At-Risk Students Who Make It to College*. Washington, DC: Office of Educational Research and Improvement, U.S. Department of Education.

Jung, S. M., and Applied Systems Institute. 1984. *Reanalysis of High School and Beyond Data to Estimate the Impact of Upward Bound*. Washington, DC: Applied Systems Institute.

Levine, A., and J. Nidiffer. 1996. *Beating the Odds: How the Poor Get to College*. San Francisco: Jossey-Bass.

Mayer, D. 1991. *Do Early Educational Awareness Programs Increase the Chances of Eighth Graders Reaching Higher Education?* Boston: Education Resource Institute.

Moore, M., and others. 1997. *The National Evaluation of Upward Bound. A 1990's View of Upward Bound: Programs Offered, Students Served, and Operational Issues. Background Reports: Grantee Survey Report, Target School Report*. Washington, DC: Mathematica Policy Research.

Muraskin, L. 1997. *"Best Practices" in Student Support Services: A Study of Five Exemplary Sites. Followup Study of Student Support Services Programs*. Rockville, MD: Westat; Washington, DC: SMB Economic Research.

Myers, D., and A. Schirm. 1997. *The National Evaluation of Upward Bound. The Short-Term Impact of Upward Bound: An Interim Report*. Washington, DC: Mathematica Policy Research; Atlanta, GA: Educational Testing Service; Rockville, MD: Westat; Houston, TX: Decision Information Resources.

Oklahoma State Regents for Higher Education. 1998. *Oklahoma Higher Learning Access Program 1997–1998 Year-End Report*. Oklahoma City, OK: Author.

Silva, T., and J. Kim. 1998. *The Federal Talent Search Program: A Synthesis of Information From the Literature and Grant Applications*. Washington, DC: Mathematica Policy Research.

© 2000 PhotoDisc, Inc.

BEST COPY AVAILABLE

The Role of Early Intervention in Education Reform

Watson Scott Swail and David Roth

Educators, policymakers, and researchers have been spinning yarn for years about what needs to happen within U.S. school systems to overcome the "rising tide of mediocrity" reported in *A Nation at Risk: The Imperative for Educational Reform* (National Commission on Excellence in Education, 1983). Education activists and social progressives have long documented the struggles of America's most impoverished young people, and most of them have reached the same disturbing conclusions. Many in the education community today would continue to agree with Jonathan Kozol's assertion, "Children from economically disadvantaged backgrounds and from ethnically diverse backgrounds are at great risk in our country's public school systems" (1991, p. 87).

It is a powerful testament to the institutionalization of inequity that the verbiage used to describe the condition of America's urban public schools has changed so little during the past decade. Education initiatives have come and gone in that time, but grave inequities in college preparation and opportunity persist.

The problem, as we see it, is that the dichotomy between the better school systems and the not-so-better systems—the haves and the have nots—presents problems in terms of true education reform. Schools, communities, and students at the upper end of the economic continuum are better prepared to change and adapt more quickly and effectively than those with more modest means. They have the resources and, perhaps more important, the political power to ensure that change happens and that adequate resources are appropriated. Less fortunate school systems have a much more difficult time navigating the waters of change and are less able to command the attention of America's political leadership. They are often ill equipped to implement complex policies that bring about dynamic, positive, systemic change.

All in all, the U.S. system of free public education is one of the finest in the world. Each year it educates more than 50 million students, and that number continues to grow over time (National Center for Education Statistics, 1999). However, it is abundantly clear that far too many students ultimately fall through the cracks. Most chilling is the homogeneity of those students who are not being adequately served by the public school system. The system does a pretty good job, on average, with students from middle- and higher-class upbringings, but it is much less effective with students who are less advantaged and are underrepresented—students who are predominantly poor and students of color.

The Role of Early Intervention

During the past few years, as U.S. support for affirmative-action policies has waned, an even more dire situation has been created for those committed to ensuring educational opportunities for all students in American public schools. Understanding clearly that the elimination of affirmative action means that students of color and other underrepresented populations will require better academic preparation and increased college awareness, policymakers are looking to programs designed to focus on these issues for the most disadvantaged middle and high school students. One of the outcomes of this realization is a dramatic increase in support for early intervention and other programs that serve economically and academically disadvantaged students. As discussed throughout this publication, these programs provide supplemental opportunities for students at the elementary and secondary levels to increase their academic skills and become more aware of their postsecondary opportunities. But programs vary greatly in whom they target, where they are coordinated, and what strategies they use.

One important misperception is that early intervention is part of *all* schools in some fashion or another. Preparation courses for college entrance examinations, college awareness activities, and academic support services are entrenched in the core curricula of higher-echelon schools. Other less fortunate schools struggle to include these important items as add-ons or rely on outside entities to provide this information to their schools and children. In other words, that which is a de facto facet of some children's education is either entirely missing for others or is included in an ad hoc—and often incomplete—fashion.

Early intervention programs—sometimes emanating from colleges and universities, sometimes from the community, and occasionally from within the

Watson Scott Swail is Senior Policy Analyst at SRI International in Arlington, Virginia.

David Roth is Director of Community Education Programs at Occidental College in Los Angeles, California.

BEST COPY AVAILABLE

school system itself—provide an array of services similar, but not equal to, those at more affluent schools. These programs are, for lack of a better term, the "finger in the dike" of the U.S. education system. They plug up the holes where students flow out of the system.

Future Directions

Clearly, there have been for years and continue to be systematic efforts at raising the level of preparation and readiness of all students for post-secondary education. The basic problem is that none of these programs are broad enough to provide services to all disadvantaged students. Some researchers have labeled these programs as "wheel of fortune" opportunities for children; unless students are lucky enough to be in a specific school—or sometimes a specific class—they miss out on these support services (Gladieux and Swail, 1998).

The hope is that the investment in strategic school reform, teaching and learning standards, and other drivers of educational progress will help alleviate many of the inequities in the school system. In the interim, to serve the most disadvantaged students, we suggest that educators and policymakers focus on the following four areas:

- ***Expanding access to early intervention activities.*** The biggest problem facing early intervention is that only a small percentage of students receive services. It is estimated that the federal TRIO programs serve less than 10 percent of their eligible clientele. The federal GEAR UP program, although in its infancy, has only 180 projects around the country. Wholesale funding increases in these programs alone would allow much-expanded service to thousands of students around the country. At the state and local levels, similar investments in supplementary programs would also expand access.
- ***Improving the instructional quality and delivery of programs.*** The variety of programs and strategies ultimately results in varying program quality. Early intervention programs must focus on standards of practice to ensure that proven strategies to help students are the norm rather than the exception. For example, although mentoring programs have proven very successful in many communities, appropriate training and selection of mentors are critical to a positive experience for students. Unfortunately, too many early intervention programs are not held to any standard of excellence. Programs operating in the public school environment must show that they have the tools and expertise to provide the very best service and most current information to the students and families they serve.
- ***Expanding opportunities for networking among programs.*** When asked what they consider to be the greatest professional development tool, educators say that it is the opportunity to network with colleagues. Unfortunately, staff from different programs almost never have the opportunity to meet and share experiences. In many cases, these programs must compete against each other, which discourages communication. Program staff need open lines of communication and more opportunities to interact and work together to help kids.
- ***Linking early intervention programs directly to schools and long-term systemic plans.*** Early intervention programs themselves are unlikely to have any long-term or systemic effects on the education system unless they have, at their core, a desire to help change the very system whose failure required their existence. Simply put, if early intervention programs do not form partnerships with the schools, they will not become part of the long-term solution to the country's education woes. In fact, some would argue that the programs could distract educators from making real change in the schools. By communicating and working toward the same goals, schools and programs can collaborate effectively and garner support from the higher education, business, and community sectors, providing a better education for all students.

Concluding Thoughts

Regardless of how much the school system improves during the next 10, 20, or 50 years, students on the lower rungs of the socioeconomic ladder will be at a disadvantage. The U.S. education system mirrors society, and as the capitalist, free-market paradigm dictates, some students will win while others lose. Even with long-term, systemic change in schools, students at the bottom rungs of the socioeconomic ladder will be much more likely to fall through the cracks of the education system.

The challenge for educators and policymakers is to ensure that appropriate safety nets are in place to catch as many students as possible. As noted, many of the mechanisms already exist, but they suffer from inadequate support. Ultimately, we believe that disadvantaged children in America will be better served if the national dialog focuses on expanding and strengthening early intervention programs rather than debating whether they should exist in the first place.

References

Gladieux, L. E., and W. S. Swail. 1998. "Financial Aid Is Not Enough: Improving the Odds of College Success." *College Board Review* (185).

Kozol, J. 1991. *Savage Inequalities*. New York: HarperCollins.

National Center for Education Statistics. 1999. *The Condition of Education 1999*. Washington, DC: U.S. Department of Education.

National Commission on Excellence in Education. 1983. *A Nation at Risk: The Imperative for Educational Reform*. Washington, DC: Author.

The success of early intervention depends on support from the entire community, including private organizations and foundations, government agencies, schools, colleges, and universities. This section of "The ERIC Review" describes the types of organizations and initiatives that support early intervention programs and contains a profile that illustrates this support.

Sponsors of Early Intervention Programs

Laura W. Perna, Robert H. Fenske, and Watson Scott Swail

Editor's note: Many early intervention programs and initiatives are discussed in this article. For more information about GEAR UP, IHAD, PFIE, Think College Early, and TRIO, see "Early Intervention Resources" on page 32.

Learning about early intervention programs can be a challenge for parents and students not only because programs are so small—programs administered by individual colleges and universities serve a median of 82 students (Chaney, Lewis, and Farris, 1995)—but also because of the wide variation in the types of organizations that sponsor such programs. Although this variety can make learning about programs difficult, it also helps ensure that, once existing programs are identified and located, a student will find a program that is well suited to his or her individual needs and characteristics. Unfortunately, no comprehensive directory, compendium, or national clearinghouse of early intervention programs has been developed. However, this article does provide a brief overview of the early intervention programs that are sponsored by private organizations and foundations; the federal government; federal, state, and local government collaborations; school-college collaborations; and colleges and universities.

Private Organizations and Foundations

The first early intervention programs were established by private organizations. Perhaps the most prominent of these programs is the "I Have a Dream"® (IHAD) Program, established in 1981. IHAD programs are designed to ensure that students stay in school, graduate, and go on to college or meaningful employment. These programs include not only guaranteed free college tuition but also academic support, personal guidance, and cultural and recreational activities. Participants' parents are expected to become involved with program activities by serving as mentors, activity leaders, and chaperons. Individual sponsors identify a group of students, such as an entire elementary school grade or all students of a certain age living in a public housing project, to "adopt."

Laura W. Perna is an assistant professor in the Department of Education Policy and Leadership at the University of Maryland in College Park, Maryland.

Robert H. Fenske is a professor of higher education in the Division of Educational Leadership and Policy Studies at Arizona State University in Tempe, Arizona.

Watson Scott Swail is Senior Policy Analyst at SRI International in Arlington, Virginia.

BEST COPY AVAILABLE

The group is composed of 50 to 75 students, on average. The sponsor pledges to work with and develop relationships with the students through high school graduation. The sponsor is also responsible for providing or securing financial support for program costs and college scholarships, and it can hire a full-time project coordinator to assist students, families, and schools. More than 160 IHAD projects have been established in 63 cities, serving more than 13,000 students.

In addition to the IHAD foundation, numerous other national, regional, state, and community-based foundations sponsor early intervention programs. Professional, civic, and service organizations, as well as businesses and corporations, also engage in early intervention activities. (To learn more about collaborative efforts to expand access to higher education, see "College Summit" on page 18.)

Federal Government

The federal government has supported early intervention activities since the mid-1960s. Starting with the Upward Bound program in 1964 and the Talent Search program in 1965, the TRIO programs[1] have helped more than 1 million disadvantaged students complete high school and enroll in college. Two-thirds of the students served by these programs must come from low-income families (incomes of less than $24,000 for a family of four) and must be first-generation college students (neither parent received a bachelor's degree).

Currently funded at $250 million, the Upward Bound program supports nearly 900 Upward Bound and Upward Bound Math/Science projects, providing more than 59,000 students in grades 9–12 with the opportunity to succeed in high school and ultimately in higher education pursuits. Upward Bound projects offer extensive academic instruction in mathematics, science, literature, composition, and foreign languages as well as counseling, mentoring, and other support services. Students meet throughout the school year and generally participate in an intensive six-week summer residential or nonresidential program held on a college campus.

The Talent Search program, currently funded at approximately $100 million, serves more than 323,000 students in grades 6–12 at 361 sites. The program provides information regarding college admission requirements, scholarships, and available financial aid to participants and their families and encourages participants to graduate from high school and to enroll in postsecondary programs.

Since 1994, the U.S. Department of Education (ED) has worked to get parents and community organizations more involved in schools through the Partnership for Family Involvement in Education (PFIE). PFIE's mission is to increase families' involvement in their children's learning at home and in school and to use family-school-community partnerships to strengthen schools and improve student achievement. Through PFIE, ED offers resources, ideas, funding, and conferences to businesses, community groups, religious organizations, and education institutions. PFIE initiatives have included student- and family-friendly policies at the workplace, before- and afterschool programs, tutoring and mentoring initiatives, and donations of facilities and technologies. One PFIE initiative especially pertinent to early intervention is Think College Early, a Web site that provides information on educational opportunities beyond high school for middle school students and their parents and teachers.

Federal, State, and Local Government Collaborations

The first federal-state early intervention collaboration was established as part of the 1992 reauthorization of the Higher Education Act. This collaboration, the National Early Intervention Scholarship and Partnership (NEISP) program, provides matching grants to states for early intervention programs. To be eligible for matching funds, a state's early intervention program must specifically target low-income students; guarantee low-income students the financial assistance necessary to attend college; provide counseling, mentoring, academic support, outreach, and other support services to elementary, middle, and secondary students who are at risk of dropping out of school; and provide information to students and their parents about the advantages of obtaining a postsecondary education and about financial aid.

The federal government encourages states to draw upon the resources, including financial resources, of local education agencies, colleges and universities, community organizations, and businesses to provide tutoring.

© 2000 PhotoDisc, Inc.

mentoring, assistance in obtaining summer employment, academic counseling, skills development, family counseling, parental involvement, and pre-freshman summer programs. Appropriations for NEISP have ranged from $200 million in fiscal year (FY) 1993 and nearly $400 million in FY 1994 to $3.1 million in FY 1995, $3.6 million in FY 1997, and $3.6 million in FY 1998. Nine states were awarded NEISP grants in FY 1998: California, Indiana, Maryland, Minnesota, New Mexico, Rhode Island, Vermont, Washington, and Wisconsin.

Several other states have also developed and supported early intervention programs. Among the state-supported early intervention programs are Arizona's ASPIRE (Arizona Student Program Investing Resources for Education) program, Hawaii's HOPE (Hawaiian Opportunity Program in Education) program, Louisiana's Taylor program, New York's Liberty Scholarship and Partnership Program, North Carolina's Legislative College Opportunity Program, and Oklahoma's Higher Learning Access Program.

The 1998 reauthorization of the Higher Education Act incorporated the central features of NEISP into a new initiative, Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP), with the goal of increasing college enrollment rates among low-income youth. Unlike TRIO programs, GEAR UP targets a cohort of students rather than particular individuals. Under GEAR UP, a program must target students attending a school in which at least one-half of the enrolled students are eligible for free or reduced-price lunch under the National School Lunch Act or reside in public housing. Currently funded at $200 million, GEAR UP is expected to dramatically improve college preparation, access, and success for underrepresented and disadvantaged groups of students.

GEAR UP grants are available to states and to partnerships comprising (a) one or more local education agencies representing at least one elementary and one secondary school, (b) one institution of higher education, and (c) at least two community organizations, including businesses, philanthropic organizations, or other community-based entities. GEAR UP grants are used to fund programs that provide counseling and other support services to at least one grade level of students, beginning no later than the 7th grade and continuing through the 12th grade.

GEAR UP effectively retains all components of NEISP, with some minor changes. The major addition is the 21st-Century Scholars Certificate program, which notifies low-income students in grades 6–12 of their eligibility for federal financial assistance under the Pell Grant program.

School-College Collaborations

In the 1970s and early 1980s, a number of collaborative early intervention initiatives were developed between school districts and colleges. Support for school-college collaborations increased during the 1980s with the enhanced national interest in systemic school reform. School-college collaborations continue to be an active and effective source of early intervention programs (Fenske, Geranios, and others, 1997). These collaborations typically connect a two- or four-year college with a middle school serving lower-income students and are designed to create a seamless transition from secondary school into a bachelor's degree program. Collaborative efforts may include such components as college visits, afterschool activities, mentoring, articulation of admissions standards, tutoring, scholarships, and college-level summer programs (Fenske, Keller, and Irwin, 1999). Entities that have actively promoted school-college collaborations include the Education Trust, the Education Commission of the States, the State Higher Education Executive Officers, and the Council of Chief State School Officers.

© 2000 Digital Stock

College- and University-Supported Programs

Early intervention programs offered by colleges and universities generally target high school students and are typically designed to increase college enrollment, academic skills development, and high school graduation rates (Chaney, Lewis, and Farris, 1995). Some individual colleges and universities sponsor programs that focus on increasing enrollment rates at their own particular institution (Perna and Swail, 1998). Programs sponsored by colleges and universities, also known as academic outreach programs, often focus on preparing at-risk students to pursue particular academic majors in college (Fenske, Geranios, and others, 1997). Other programs seek to identify academically or artistically gifted youth regardless of their backgrounds and encourage these students to attend a particular institution. Such outreach is not unlike the recruiting efforts of an institution's intercollegiate athletic program.

Community colleges have institutionalized early intervention through initiatives known as "2+2," or middle college, and urban partnerships (Fenske, Geranios, and others, 1997). Such initiatives typically connect a community college district with one or more local school districts. The "2+2," or middle college, program is an alternative program that allows students to earn high school and

BEST COPY AVAILABLE

college credits simultaneously while taking courses on a community college campus. Urban partnerships, which work to increase college enrollment and degree completion rates among underrepresented urban students, are coordinated by the National Center for Urban Partnerships and currently operate in 16 cities nationwide (Fenske, Geranios, and others, 1997).

Conclusion

Learning about the availability of early intervention programs has been hampered by the absence of a national directory or compendium of programs as well as by the wide variety of program sponsors and other program characteristics. We hope that a national clearinghouse of information on these programs will soon be available to assist students and their parents with locating the program that best meets their needs. In the meantime, please refer to "Early Intervention Resources" on page 32 for more information about early intervention programs. Local community colleges, four-year colleges and universities, and local school district offices may also be good sources of information about early intervention programs. In most cases, the best initial contact will be an institution's chief administrator for student affairs.

Note

[1] The term "TRIO" describes the three original federal programs (Upward Bound, Talent Search, and Student Support Services) developed to help disadvantaged students progress through the academic pipeline from middle school to graduate school. The federal TRIO programs now include eight distinct outreach and support programs.

References

Chaney, B., L. Lewis, and E. Farris. 1995. *Programs at Higher Education Institutions for Disadvantaged Precollege Students.* Washington, DC: Office of Educational Research and Improvement, U.S. Department of Education. National Center for Education Statistics Report No. 96–230.

Fenske, R. H., C. A. Geranios, and others. 1997. *Early Intervention Programs: Opening the Door to Higher Education.* ASHE-ERIC Higher Education Report, vol. 25, no. 6. Washington, DC: George Washington University, Graduate School of Education and Human Development.

Fenske, R. H., J. E. Keller, and G. F. Irwin. 1999. "Toward a Typology of Early Intervention Programs." *Advances in Education Research* 4 (winter): 117–33.

Perna, L. W., and W. S. Swail. 1998. "Early Intervention Programs: How Effective Are They at Increasing Access to College?" Paper presented at the National Forum of the College Board, Orlando, Florida, November 2, 1998.

© 2000 PhotoDisc, Inc.

College Summit

Adrianna Kezar

Editor's note: This article presents a brief profile of College Summit to illustrate the important role community partnerships play in expanding access to higher education.

College Summit is a national nonprofit organization that helps low-income children enroll in college. Economically disadvantaged children face many obstacles that typically prevent them from pursuing higher education. As a result, a large, untapped pool of students exists in the United States at a time when a critical shortage of college-educated workers threatens the country's economic viability in the global marketplace. College Summit strives to develop this talent pool by working with students and with the adults and institutions that serve them.

Since its founding in 1993, College Summit has served more than 1,078 students at 37 program sites. Students served by the program are African Americans (50 percent), Latinos (36 percent), Native Americans (10 percent), Asian Americans (2 percent), and Caucasians (2 percent). More than 83 percent of the children come from single-parent families.

Components

College Summit has three main components: (1) a four-day, on-campus workshop that helps students with the college application process; (2) a mentor training program for adults who provide ongoing help to students; and (3) a program that provides organizational planning and ongoing guidance to help communities and schools develop early intervention programs. College Summit evaluates and modifies these components as needed.

Partners

College Summit partners with schools, youth agencies, colleges, community groups, and corporations throughout the country to help communities connect students to colleges where they will thrive. Some partnerships last for years, while others—in which College Summit develops its partner's or a community's capacities and then moves on—are short term.

College Summit receives support from many prominent corporations (such as Lucent Technologies, the John Nuveen Company, the St. Paul Companies, and U S WEST) and foundations (such as the Rockefeller Foundation, the John S. and James L. Knight Foundation, and the Echoing Green Foundation). Support from corporations and foundations is critical for program development and capacity building.

Outcomes

Since 1993, College Summit students have enrolled in college at a rate of 79 percent, compared with a nationwide rate of 34 percent for their peers at the same income level who have not participated in the program. The college retention rate among program students is 80 percent; this figure is remarkable because it far exceeds national college retention rates for all students, let alone low-income students. The figure shows that College Summit helps students not only attend but also succeed in college.

Future

College Summit continues to grow and develop. The organization is working to develop more corporate and foundation support so that it can extend its program to more communities and students. Its proven track record and ongoing evaluations demonstrate its efficacy, helping it obtain additional funding.

For more information about College Summit, call 202–265–7707; write to College Summit, P.O. Box 9966, Washington, DC 20016; or visit the Web site at http://www.collegesummit.org.

© 2000 PhotoDisc, Inc.

Adrianna Kezar is Director of the ERIC Clearinghouse on Higher Education at The George Washington University in Washington, DC.

Parents, educators, and other community members play a vital role in the success of early intervention. This section of "The ERIC Review" discusses how to help students find and apply to an early intervention program and describes specific steps that parents can take to help their child prepare for college. In addition, testimonials of students who have participated in early intervention programs appear throughout this section. Students, parents, and educators will find the participants' observations and experiences both illuminating and inspiring.

Identifying, Selecting, and Applying to an Early Intervention Program

Ann S. Coles

Editor's note: The "Student Snapshots" that appear throughout this article represent the experiences of actual students. The students' names have been changed to protect their privacy.

Identifying, selecting, and applying to an early intervention program is similar to finding a college that fits the needs, interests, and personality of the student. Parents and students will find that, like colleges, early intervention programs vary. Some programs prepare students for college through afterschool tutoring sessions and skill-building classes; others offer Saturday workshops, college exploration clubs, or intensive summer programs. However, all programs strive to strengthen students' academic skills, help them learn to manage their time, and provide them with opportunities to explore new ideas and interests.

This article describes resources for identifying early intervention programs, criteria for selecting a program, and tips for applying to a program. In addition, the article discusses what students can do to get the most out of a program and what parents and other family members can do to support students' efforts.

© 2000 PhotoDisc, Inc.

Ann S. Coles is Senior Vice President of Education Information Services at The Education Resources Institute (TERI) in Boston, Massachusetts.

Resources for Identifying Programs

Local Resources

Schools are an excellent starting point for finding information about early intervention programs. Guidance counselors and teachers often know about a wide range of programs that take place during the school year or in the summer. In addition, staff members know about their students' experiences in particular programs and how those programs have benefited their students. School libraries, as well as college- and career-planning centers in high schools, typically maintain files of precollege career exploration and enrichment programs.

A school district's guidance office is also an excellent resource. This office assembles and disseminates communitywide information about early intervention programs; in some districts, it even distributes an annual directory of enrichment programs to every middle and high school student.

Many community colleges and universities sponsor early intervention programs and other academic-enrichment programs. Information can be obtained by calling the college's general information number and asking for the school-college partnership office or community relations office. The admissions office is another good resource.

Staff members of churches and community agencies that work with young people often know about early intervention programs. Staff members are frequently contacted by, and refer many students to, programs that are seeking students. In addition, some Boys and Girls Clubs, YMCAs, YWCAs, and other youth-serving organizations offer early intervention programs or incorporate college-planning information into their tutoring and mentoring programs. Counselors at youth employment programs know about career exploration programs, many of which involve preparing students for a college major that is related to a particular career, such as engineering, medicine, or law.

Communitywide information resources include public libraries, United Way information and referral services, and municipal government offices. Like United Way, some libraries have information and referral services. Municipal governments, particularly in urban areas, often publish "teen yellow pages" or similar directories of youth services, including early preparation and college-planning resources.

State Resources

At the state level, the department of education and the board of higher education are useful for identifying early intervention programs. State department of education Web sites typically have sections for parents and students that provide college-planning resources and may include information about enrichment programs. Links to each state's Web site are provided on the National Association of State Boards of Education's Web site (http://www.nasbe.org/stateprofilebody.html). State board of higher education Web sites may also have information about programs. Links to these sites can be accessed through the U.S. Department of Education's Directory of State Grant Agencies (http://www.ed.gov/offices/OPE/agencies.html).

National Resources

At the national level, the best sources of information for identifying early intervention programs can be accessed through the Internet. For example, the U.S. Department of Education (http://www.ed.gov/thinkcollege), the Federal TRIO Programs (http://www.ed.gov/offices/OPE/HEP/trio), the National TRIO Clearinghouse (http://www.trioprograms.org/clearinghouse), and the College Board (http://www.collegeboard.org) have Web sites that provide program descriptions, eligibility criteria, and other relevant information. (For more information about these and other national online resources, see "Early Intervention Resources" on page 32.)

Criteria for Selecting a Program

The most important considerations when selecting an early intervention program are student needs and interests, program duration and location, student eligibility criteria, and program cost.

Student Needs and Interests

Students should choose an early intervention program that fits their needs and interests. Although all programs place a heavy emphasis on building academic skills, they can vary with respect to the amount of structure imposed on the student. In addition, some programs focus on a particular career or field, such as science, mathematics, arts, or technology.

Student Snapshot

James Ly, a ninth grader at a large urban high school, knew he wanted to go to college but felt he needed more information and tutoring than his school offered. At a school assembly, he heard a staff member from a federally funded Upward Bound program talk about how the program could help students improve their grades and could guide them through the college admissions process. Learning about how other students from his high school had participated in Upward Bound and had done well convinced James to apply to the program.

BEST COPY AVAILABLE

Student Snapshot

Myra Gonzalez, an eighth grader, wanted the experience of living away from home and managing her own schedule without her parents' input. When a representative of a two-week summer program for Latina women visited Myra's high school, Myra realized that the program, which was offered by a nearby women's college, would provide her with the opportunity to live on a college campus and to be independent. The representative called Myra's parents to explain the program and to discuss the experiences of girls from similar backgrounds. When Myra's parents heard that their daughter would receive help with preparing for college and that counselors would be living with the students in the residence halls, they were convinced to let her attend.

Program Duration and Location

Some early intervention programs offer year-round activities; others take place during the school year or summer only. During the school year, activities occur after school at nearby colleges or community agencies. Summer programs are usually intensive experiences in which students reside on a college campus for two to six weeks. Many summer programs include continuing support during the school year in the form of mentoring, Saturday workshops and field trips, afterschool tutoring and help with homework, and return visits to the campus where the program took place.

Student Eligibility Criteria

Eligibility criteria, which are important in determining which students are chosen to participate, can vary widely across early intervention programs. Age and grade level are common criteria used in making admission decisions. Early intervention programs also target students at specific academic skill levels; a few programs are designed for gifted students, while others target at-risk students who have potential but need academic support, counseling, or both. Other admission criteria include family income (some programs accept only students in families with incomes below official poverty levels), geographic location (many programs give preference to students who attend a particular high school or live in a specific community), and linguistic background.

Program Cost

The cost of an early intervention program is almost never a barrier to the participation of an interested student, regardless of family income. Programs that serve students from low-income families are usually free. Other programs charge tuition but typically offer scholarship assistance based on a student's financial need. If money is an issue, find out which programs include financial assistance.

Other Criteria

In addition to considering student needs and interests, program duration and location, student eligibility criteria, and program cost, parents and students should ask the following questions before selecting an early intervention program:

- What are the program's goals?
- What activities are students involved with? What is the schedule for a typical day?
- What do students learn by participating in the program, and what are the results? Do the students have higher test scores, improved grades, or better attendance or behavior?
- Who staffs the program—professional teachers, college students, or others?
- If the program is residential, what are the housing arrangements?

Student Snapshot

As an only child living in a one-parent home, Cindy McConnell found herself without a place to live when her mother, convicted on a drug charge, went to prison. A concerned teacher, knowing of Cindy's need for support, linked her with a counselor of a federally funded Upward Bound program at a nearby university. The Upward Bound counselor helped Cindy find a place to live and provided Cindy with academic support through afterschool tutoring and weekend activities. Cindy spent summers in the Upward Bound residential program on the university campus, improved her academic performance substantially in spite of her personal difficulties, and received a full college scholarship.

What adults live with the students? Do boys and girls live in the same building or in separate ones?

- What are the expectations for students and the rules for student conduct?
- Where have program graduates gone to college? What kind of financial aid have they received?
- How many students apply, and how many are selected? What are the selection criteria? Is preference given to particular students, such as siblings of current or former program participants? If so, on what basis?
- Does the program have a support system for parents?
- Do staff members contact students and parents to address problems on a timely basis?
- Are there resources to help students overcome potentially distracting family issues?
- Will the program stay the course with a committed but struggling student?

Tips for Applying to a Program

After students have identified early intervention programs that fit their selection criteria, they should

- Contact each program directly for information about the application requirements. These typically include forms to be completed by the student and his or her parents (or guardians), an interview, and a student essay. In addition, programs often require parents to complete a form that indicates their commitment to supporting their child's participation and to attending informational workshops and other activities. Programs may also require a student's school transcripts and medical information, recommendations from teachers and other adults who know the student well, and documentation of family income.
- Make an appointment to visit each program. Most programs encourage students, as well as parents, to visit the program site before applying, and some require a visit as part of the application process.
- Write an essay (if one is required for admission) describing the experiences and ideas that have influenced their personal development. For example, students often write a description of a family member, a major event in their life (such as a move or an illness), or an experience that changed them significantly. Correct grammar, correct spelling, and neatness are critical.
- Ask for recommendations from adults who know their strengths, appreciate their talents, and support their development. Students who are unsure about the best person to ask should seek advice from the program's director or counselor. Students can also ask trusted peers to suggest approachable adults who could best provide assistance.
- Ask about application deadlines and make certain that their application materials are submitted on time. Students should also check with the program's admissions office to verify that their transcripts, recommendations, and other application materials have been received. If everything was not received, students need to remind the appropriate individuals or offices to submit the materials as soon as possible.

Student Snapshot

Jerome Brown was finishing seventh grade when his mother—and only parent—died. Concerned about Jerome's depression and failing grades, a teacher asked the counselor from the Educational Talent Search project serving his school to help Jerome. The Talent Search counselor found that Jerome was fascinated with marine life. The counselor identified a summer marine-exploration program and persuaded the program to provide Jerome with a full scholarship. The program captured Jerome's imagination, and he returned to school in the fall with renewed confidence and interest in learning.

Getting the Most From a Program

The most important factor in determining how much a student will benefit from participating in an early intervention program is personal motivation. To succeed, students must have a clear understanding of the program's goals and expectations in advance. Program staff members will expect students to develop new skills and take on new challenges. A positive attitude is also important: Students must be open to new experiences, willing to do things differently, and willing to establish relationships with people from different backgrounds. The most successful students are the ones who choose to participate and then commit themselves wholeheartedly to meeting the program's expectations.

Support From Families

Like students, parents and other family members must clearly understand the program's goals and expectations in advance, as well as the resulting demands that the program places on students. Students who participate in early intervention programs will need the encouragement and support of family members to help them meet and overcome challenges that they encounter.

BEST COPY AVAILABLE

Helping Your Child Prepare for College

Jacqueline E. King

It has become a truism that some type of postsecondary education is necessary for success in today's economy. Most parents appreciate the importance of higher education. They also worry about whether their child will be admitted to the college of his or her choice and wonder how they will pay for college once their son or daughter has been accepted.

Parents can ease the transition to college by helping their child prepare intellectually and financially and by learning about the college admissions and financial aid processes. These tasks will be easier if parents start the college-planning process when their child is very young and break it down into manageable steps. This article describes the steps that parents can take to help their child prepare for college at each stage of life.

Preschool

Many people assume that the high school years are the most important for college preparation, but the most crucial period is when a child is very young. During their child's preschool years, parents must make the core investment to help prepare their child for success in college.

One of the decisions that expectant parents should make is how they will go about saving for their child's college education. This may seem too soon to start saving, but investing even a small amount of money each month will pay huge dividends if parents start early. Although many parents will not be able to save all the money necessary to pay for four years of college, they should save as much as they can because (1) every dollar saved typically increases in value through compound interest and is money that they or their child will not have to borrow to pay for college, and (2) the financial aid system presumes that paying for college is a partnership between parents, students, the government, the private sector, and colleges. Most students rely on all these sources to pay for college.

Parents can also help prepare their child for college by investing in his or her intellectual development. Research on brain development now indicates that the most rapid and intense period of intellectual development in humans is during the first years of life (Barnet and Barnet, 1998). Parents can stimulate and encourage their child's natural curiosity and capacity for learning by talking, reading, and singing to their baby; engaging their toddler in conversation; and choosing toys and entertainment that are intellectually enriching.

Another aspect of fostering intellectual development is encouraging the child's aspirations and expectations for the future. Many people credit their success to their parents for having believed in them and for having told them that they could be whatever they wanted to be. It is especially important for low-income parents, who may have lacked parental encouragement when they were young, to transmit a message of hope and high expectations to their child.

Parents can encourage their child's dreams by talking about what he or she might want to be someday, exposing their child to a variety of career

Preparing Your Child for College: Crucial Steps for Parents

- Investigate and choose a savings plan as early as possible.
- Invest in your child's intellectual development beginning in infancy.
- Encourage your child's high hopes and dreams for the future.
- Actively participate in your child's school experience.
- Meet with a school guidance counselor to ensure that your child is enrolled in college preparatory courses in middle and high school.
- Investigate colleges with your child before his or her junior year in high school.
- Visit your child's colleges of choice.
- Learn about and apply for financial aid.
- Establish a budget and financing plan for your child's college education.

Jacqueline E. King is Director of Federal Policy Analysis at the American Council on Education in Washington, DC.

BEST COPY AVAILABLE

options, and choosing toys that allow their child to live out his or her dreams about the future. As their child matures, parents can describe the type of postsecondary education that various careers require and can introduce the vital concept that future success is predicated on achievement in school.

Elementary and Middle School

As their child enters and then progresses through school, parents can continue preparing him or her for college by building on the work that they have already done and by helping their child have a school experience that is happy, enriching, and productive.

Children of all ages need their parents' active interest and participation in the education process. During the elementary school years, parents can encourage their child to challenge him- or herself in school, help their child develop good study habits, and support their child's involvement in school- and community-based extracurricular activities. Parents should also stay in close contact with teachers and, when possible, volunteer at school in some capacity. For additional parent activities that are recommended during the elementary and middle school years, see the box on this page.

Early exposure to college helps children develop the expectation that higher education will be part of their future. During the elementary and middle school years, parents should make a conscious effort to introduce their child to different college environments. For example, parents can show their child different types of institutions, such as a large public university and a small private college, so that he or she can begin to understand the diverse nature of higher education. Parents who have not attended college may find that casual, early experiences on campus, such as simply touring the grounds, can make the prospect of sending their child to college seem less daunting.

During the middle school years, many schools begin to track students into either a college preparatory or general course of study. The U.S. Department of Education (ED) recommends that children take

© 2000 PhotoDisc, Inc.

certain types of courses in middle school or junior high school (see the box on page 27). Parents should monitor course schedules carefully and intervene if their child is being placed into courses that do not prepare students for college.

Although children should take all the ED-recommended courses, it is crucial that they take algebra in grade 8 and geometry in grade 9 because these two courses are the linchpin of the college preparatory curriculum. Children who take algebra and geometry at these respective times are far more likely to attend college than those who do not (College Board, 1990).

High School

Early in their child's freshman year of high school, parents should meet with a school guidance counselor to ensure that their child enrolls in college preparatory courses. (For a list of recommended college preparatory courses, see the box on page 28.) Taking—and doing well in—these courses are a child's two most important responsibilities in high school. Children interested in attending a highly competitive college or university should also enroll in honors and advanced placement courses.

During the first two years of high school, parents and students should familiarize themselves with various

Parent Activities During the Elementary and Middle School Years

- Recognize that education is a lifelong process.
- Recognize that there are many places where learning can take place.
- Recognize school as work.
- Encourage extracurricular and outside school activities.
- Maintain a link with the school.
- Serve as a home teacher or tutor.
- Provide a constructive study climate.
- Encourage mastery of basic skills.
- Become involved in your child's school work.
- Express respect for effort.
- Recognize doing one's best as success.
- Recognize degrees of competency.
- Emphasize the importance of school.
- Encourage positive work attitudes.

This information is adapted from National Association for College Admission Counseling. 1998. *PACT: Parents and Counselors Together*. Alexandria, VA: Author. (Available online at http://www.nacac.com/marketplace1.html)

BEST COPY AVAILABLE

A Message From a Student

My name is Ke'Anna Brown. I'm a sophomore at Heritage High School in Newport News, Virginia. This is my fifth year in the Educational Talent Search (ETS) program at Hampton University.

Photo courtesy of Ke'Anna Brown

Ke'Anna Brown is a high school student in Virginia.

ETS has helped me develop the skills to succeed in school and prepare for college. My teachers at ETS have helped me with homework, school projects, time management, and college planning. The program has also provided me with tutoring, counseling, and study skills development—helping me attain a grade point average of 3.61 and a rank of 10th in a class of 472 students.

As an ETS student, I've also had the opportunity to participate in various activities that will help me succeed in college and in my future profession, medicine. Through the ETS Job Shadowing and Mentoring Program, I have been paired with a professor who has the same career interests as I do. ETS also gave me the opportunity to attend Howard University's Summer Residential Math and Science Initiative (MSI) Program. While there, I took a science class that taught me how to distinguish between scientific evidence and personal opinion. The program also took us to the NASA Research Center, the National Air and Space Museum, the Great Blacks in Wax Museum, and various other places in the Baltimore-Washington, DC, area. These experiences have contributed to my understanding of scientific knowledge and my ideas of how I can contribute as a doctor.

ETS has also taught me to be independent. It has encouraged me to participate in clubs, athletic events, organizations, work, and community activities. Once, my classmates and I were featured on KID TALK, a TV talk show for kids, in which we talked about leadership and how it plays a major role in our lives today.

My experiences in ETS have helped me win the Mayor's Outstanding Youth Award, third place in Howard University's MSI Science Bowl, and an Outstanding Leadership Award. I have also been recognized for perfect attendance and through membership in the A-B Honor Roll. I also had the honor of participating in the Youth Olympics at Mary Washington College. I would like to thank Hampton University and the entire ETS staff for their help and support in getting me where I am today!

Recommended Course Work for Students in Middle School or Junior High School

Type of Course	When and Why To Take the Course
Math	Every year, including algebra I in grade 8 and geometry in grade 9. Algebra and geometry are the foundation for all college math and science courses.
English, science, and history and geography	Every year. Along with math, these subjects form the core of academic preparation for college.
Foreign language, computer science, and the arts	Whenever possible. Most colleges expect students to have studied a foreign language and taken some classes in the arts, and all colleges expect students to know how to use a computer. Students should take advantage of every opportunity to learn about these subjects.

This information is adapted from U.S. Department of Education. 1997. *Getting Ready for College Early: A Handbook for Parents of Students in the Middle and Junior High School Years.* Washington, DC: Author. (Available online at http://www.ed.gov/pubs/GettingReadyCollegeEarly/#step2)

types of colleges, associated costs of attendance, and related financial aid programs. Children can begin to investigate colleges that will meet their academic and personal needs. The College Is Possible Web site (http://www.collegeispossible.com/choosing/search.htm) features several free college-search services that can assist students in this process.

Parents can help their child select a college by keeping an open mind, allowing their child to explore a range of options, and encouraging their child to apply for both admission and financial aid at the colleges that they most want to attend. Parents should not rule out an institution until they have discussed their financial situation with a financial aid officer and have either thoroughly investigated the college's financial aid program or received a financial aid award. (After financial aid has been deducted, the cost of attending public and private colleges can be very similar.)

Parents need to discuss their financial limits with their child early in the college investigation process to avoid possibly painful disappointments later on. Children need to understand that their choice of college will be, at least in part, contingent on their parents' ability and willingness to pay. If parents want to place any other restriction on their child's choice of institution, such as distance from home or the college's religious affiliation, they should let their child know early in the process.

During a student's junior and senior years of high school, there are many forms to fill out and deadlines to meet, including registering for and taking college admissions tests, completing college applications, and submitting financial aid forms. Parents can help by working with their child to develop a calendar that organizes all the requirements and deadlines in one place. The College Is Possible Web site (http://www.collegeispossible.com/choosing/calendar.htm) includes a college admissions and financial aid calendar that parents can help their children modify with specific dates or deadlines for tests, admissions applications, and financial aid applications.

If at all possible, parents should accompany their child on visits to the colleges on the child's shortlist. To gain as complete a picture of the campus as possible, parents should schedule the visit for when classes are in session and should inform the admissions office of their plans. Typically, the admissions office will arrange for a campus tour and a visit to one or more classes. Sometimes admissions offices can also arrange for prospective students to spend the night in campus housing with a student host.

Understanding and applying for financial aid are probably two of the most daunting aspects of preparing for college. Learning about the process early will help reduce confusion and stress. Many good sources of information about financial aid exist. For example, the College Is Possible Web site (http://www.collegeispossible.com/paying/paying.htm) describes basic facts and common misconceptions about financial aid, lists relevant books and brochures, and provides links to recommended Web sites.

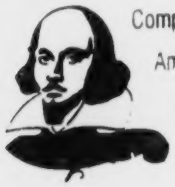
Although researching and securing financial aid may seem like going on a treasure hunt, the process is fairly straightforward. About 95 percent of all student aid is awarded by the federal government, state governments, and colleges and universities, all of which use the Free Application for Federal Student Aid (FAFSA). To find out more about the FAFSA or to file the form online, visit FAFSA's Web site at (http://www.fafsa.ed.gov). The FAFSA is also available at high school guidance offices and public libraries. Some states and colleges use their own forms in addition to the FAFSA, so parents should obtain a financial aid application packet from each institution to which their child is applying and should meet all deadlines (each college typically has its own application deadlines for financial aid).

About five percent of financial aid comes from private scholarships and is awarded on the basis of many different criteria. Private scholarships are well worth researching and applying for, but they are no substitute for filing the FAFSA and any required college or

BEST COPY AVAILABLE

Recommended College Preparatory Course Work for High School Students

English (minimum four years)



- Composition
- American literature
- English literature
- World literature

Mathematics (minimum three to four years)

- Algebra I (if not completed in grade 8)
- Geometry
- Algebra II
- Trigonometry
- Precalculus
- Calculus

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$\int \cos(12+14y)\,dy$$

History and geography (minimum two to three years)

- Geography
- U.S. history
- U.S. government
- World history
- World cultures
- Civics

Laboratory science (minimum two to three years)

- Biology
- Earth science
- Chemistry
- Physics

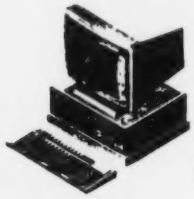
Foreign language (minimum two to three years)

- French
- Spanish
- German
- Latin
- Russian
- Japanese

Visual and performing arts (minimum one year)

- Art
- Drama
- Dance
- Music

Electives (minimum one to three years)



- Economics
- Psychology
- Statistics
- Computer science
- Communications

This information is adapted from U.S. Department of Education. 1997. *Getting Ready for College Early: A Handbook for Parents of Students in the Middle and Junior High School Years*. Washington, DC: Author. (Available online at http://www.ed.gov/pubs/GettingReadyCollegeEarly/#recs)

A Message From a Former Student

Photo courtesy of Alfred Ramirez

Alfred Ramirez is President of the National Community for Latino Leadership in Washington, DC. He graduated from Columbia University with a B.A. in political science and urban studies.

Years ago, I was a high school sophomore standing in the cafeteria line, listening to the guy in front of me talking about a terrific program at East Los Angeles Community College. On Saturdays, along with other students who were bused in from six different high schools, he was tutored, fed, and given a stipend. He also mentioned that he would be taking courses at the college during the summer!

Well, to make a long story short, I found out more about the program and pleaded with my high school counselor to ask the program director to let me apply. This program was Upward Bound, a program that would have a profound impact on my life.

Over a period of three years, teachers, counselors, and tutors from the surrounding high schools spent their Saturdays and summers with me and the other students in Upward Bound. Academically, I was an average student before I joined Upward Bound, but through the assistance and encouragement I received throughout the program, my grades improved steadily, to the point where I received some wonderful scholarship opportunities!

It is significant to know that I am the oldest of five children, born and raised in East Los Angeles, California. My father has been a barber for 42 years, and my mother had worked, off and on, while raising us. No one in my immediate family had ever been to college, and only a few of my relatives had gone. I was going to apply to only three colleges, none of which were more than 35 miles from my house.

The Upward Bound staff encouraged me to set my college expectations higher. They assisted me throughout the application process and even reviewed my essays. I couldn't afford the fees for the standardized tests or the $30 to $50 college application fees. Upward Bound helped me to get fee waivers for everything. I ended up applying to eight colleges, and I was admitted to five and wait-listed at the other three! I accepted a scholarship offer from Columbia University in New York City and prepared to get onto a plane for the first time in my life.

Upward Bound helped me to fill the gap between what I dreamed of doing and what I believed would actually come true. It also helped make it possible for me to attain the life I dreamed of.

As I look back, I have a few suggestions for others who attend programs such as Upward Bound:

1. Don't spend too much time socializing at the expense of learning.
2. Make friends and maintain friendships.
3. Avoid rumors.
4. Have high aspirations and high expectations. (Dream big; believe that anything is possible and that the right things will happen.)
5. Believe that there is no such thing as absolute failure.
6. Learn from your mistakes and help others not to make them.

BEST COPY AVAILABLE

state forms. For a list of free scholarship-search services on the Internet, visit the College Is Possible Web site (http://www.collegeispossible.com/paying/scams.htm). Scholarships are also listed in directories that are available at most public libraries.

Once the application for financial aid has been processed, parents will receive a financial aid award letter from every college to which their child has been accepted for admission that indicates the amount of grant or scholarship aid, student loans, and work-study funds a student can receive at that institution. At that time, parents must do some serious number crunching with their child. First, they must establish a total budget for the student, including fixed charges for tuition and room and board (if the student will live on campus) as well as estimates for transportation costs, entertainment, books, supplies, clothing, and so forth. This step is vital, but many parents skip it. Parents often send their child off to college with no preset expectations about how much he or she may spend on discretionary items. These costs can add up, and it is not unusual for financially inexperienced college freshmen to overspend.

After a realistic budget has been negotiated, the next step is to subtract grants and scholarships from the total amount and determine how much of the remainder will be paid by the parents, by the student, and by credit (student loans, private education loans, credit cards, and/or car loans). Once all of these questions have been answered, the child—with the guidance of his or her parents—can determine which college is the best academic, social, and financial "fit." Regardless of whether their child chooses a state college or a private university, every parent will benefit tremendously from having a well-thought-out financial plan before their child begins to pack for college.

Resources

The College Is Possible campaign offers several resources to help people learn more about preparing for college. For example, the College Is Possible Web site (http://www.collegeispossible.org) contains links to books, other Web sites, and additional resources available to help parents and students at each stage of this journey. In addition, the free publication "College Is Possible: A Resource Guide for Parents, Students, and Education Professionals" can be obtained by calling the Federal Student Aid Information Center at 1–800–433–3243.

References

Barnet, A. B., and R. J. Barnet. 1998. *The Youngest Minds: Parenting and Genes in the Development of Intellect and Emotion.* New York: Simon and Schuster.

College Board. 1990. *Changing the Odds: Factors Increasing Access to College.* New York: Author.

© 2000 Digital Vision

A Message From a Former Student

Photo courtesy of Sherri Martin

Sherri Martin is a Financial Aid Specialist at Trinity College in Washington, DC, where she received a B.A. in history and is now pursuing an M.A. in counseling.

As a student enrolled in gifted and talented programs in elementary school and junior high, I performed very well academically, was very involved in extracurricular activities, and enjoyed school. Therefore, my parents had very high expectations that I would not only complete high school but would also pursue a postsecondary education. With the direction and support of my junior high school guidance counselor and teachers, I was able to gain acceptance into Benjamin Banneker Academic, a public, college preparatory high school in Washington, DC.

Although I had proven that I deserved my place at Banneker, I could not help but feel that I was a step behind there. Most Banneker students came from families in which one or both parents had attended college. Yet no one at my home had been through the experience of applying to and attending college. Attending high school with the sons and daughters of surgeons, lawyers, principals, and judges awakened me to my own social and economic status and its disadvantages when preparing for college.

The Howard University Upward Bound program answered the many questions that I had about higher education and directed me toward the extra resources that I needed to prepare for college as a first-generation, minority, and low-income student. I benefited greatly from Upward Bound's academic tutoring, financial aid advice, workshops, fee waivers (for college applications and standardized tests), and personal counseling.

Upward Bound was also a source of social and emotional support for me. The Upward Bound staff members were positive role models for me, and they have continued to support me even after high school. Two of my former Upward Bound counselors even attended my college graduation!

The opportunity to experience campus life at Howard University during the school year and stay in the residence halls during the summer sessions helped me see what college is like and make a smooth transition to college. I especially appreciated the opportunity to make friends with peers who had backgrounds similar to mine. With shared experiences and ambitions, we were able to help each other pursue our goals for college.

In sum, the Howard University Upward Bound program was instrumental in offering the extra support I needed as a first-generation, college-bound student. Unfortunately, many of my peers from my neighborhood did not have the opportunity to attend, or were not interested in, precollege programs. As a result, they became discouraged in college and dropped out after freshman year or went through extra hardships to obtain their degrees.

This section of "The ERIC Review" presents resources that parents, students, educators, and community leaders can use to learn more about early intervention programs and other means of college preparation. We hope that you will find these resources helpful as a starting point for further investigation.

Early Intervention Resources

Patricia Wood and Linda Schartman

This section offers a sample of the many resources devoted to early intervention and college preparation. Entries include organizations, online federal publications, ERIC resources, and other federally sponsored resources.

21st Century Community Learning Centers (CLCs)
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202–6175
Phone: 202–260–0919
Fax: 202–260–3420
E-mail: 21stCCLC@ed.gov
Web: http://www.ed.gov/21stcclc

The 21st Century CLCs Program awards grants to rural and inner-city public schools, or consortia of such schools, to enable them to plan, implement, and expand projects that benefit the academic, health, social services, cultural, and recreational needs of the community. Thousands of rural and inner-city public schools across the nation—in collaboration with other public and nonprofit agencies, organizations, local businesses, postsecondary institutions, scientific and cultural organizations, and other community entities—are now participating as 21st Century CLCs. At CLCs, families can find homework centers, mentoring, drug and violence prevention counseling, college preparatory courses, and enrichment in core academic subjects. The 21st Century CLC's Web site provides additional information about CLCs, including the size and scope of grant awards, the range and nature of services provided, and selection criteria. The site also includes a guide for planning a CLC and an application to obtain funding from the 21st Century CLC's Program.

ASPIRA
1444 Eye Street, NW, Suite 800
Washington, DC 20005
Phone: 202–835–3600
Fax: 202–835–3613
E-mail: info@aspira.org
Web: http://www.aspira.org

ASPIRA is the only national nonprofit organization devoted solely to serving Puerto Rican and Latino youth through leadership development and education. Each year, ASPIRA serves more than 25,000 youth and their families through various educational programs and activities that help them develop their leadership skills, academic skills, self-esteem, community involvement, and awareness and pride in their cultural background. ASPIRA's Web site provides information about scholarships, financial aid, and ASPIRA programs such as ASPIRA Math and Science Academy, a national math and science enrichment program for Latino youth.

A Better Chance
National Office
College Preparatory Schools Program
419 Boylston Street
Boston, MA 02116–3382
Toll Free: 800–562–7865
Phone: 617–421–0950
Fax: 617–421–0965
E-mail: ncaruso@abetterchance.org
Web: http://www.abetterchance.org

Patricia Wood is Associate Director of the ERIC Clearinghouse on Higher Education at The George Washington University in Washington, DC.

Linda Schartman is a writer/editor at ACCESS ERIC in Rockville, Maryland.

Through a range of programs, A Better Chance works with students of color from the sixth grade through college to help them access expanded educational and career opportunities. A Better Chance programs include the College Preparatory Schools Program, which places academically talented and motivated students of color in academically rigorous public and private high schools, and the Pathways to College program, which provides afterschool support for promising students of color. A Better Chance's Web site includes a resource bank with links to community and cultural resources; education funding and access resources; and books about scholarships and financial aid, school listings, and summer opportunity listings.

Coalition of America's Colleges and Universities
Web: http://www.collegeispossible.org

The Coalition of America's Colleges and Universities is the combined effort of nearly 1,200 colleges and universities to enhance public knowledge about how to finance a college education. It has pooled the knowledge of thousands of admissions and financial aid professionals in the College Is Possible campaign. The coalition's Web site offers many resources for parents, students, and education professionals, including information on preparing and paying for college. In addition, the publication "College Is Possible: A Resource Guide for Parents, Students, and Education Professionals" can be ordered free of charge by calling the Federal Student Aid Information Center at 1–800–433–3243.

College Board
45 Columbus Avenue
New York, NY 10023–6992
Phone: 212–713–8000
Fax: 212–713–8184
E-mail: jhamill@collegeboard.org
Web: http://www.collegeboard.org

The College Board is best known for writing the Scholastic Assessment Tests™, but it also provides many other services, including financial aid, counseling, placement, college admission, and enrollment services. Many of these services are available free of charge on its Web site. The College Board is also developing the first nationwide directory of precollege outreach programs, including Talent Search, Upward Bound, and GEAR UP programs; nonfederal, community-based programs; college-based programs that teach academic, social, and study skills; programs that enhance self-esteem and motivation; and school-based tutoring or special skills enrichment programs. More information about this directory, *The National Survey of Outreach Programs*, is available on the College Board's Web site (http://www.collegeboard.org/policy/outreach).

Council for Opportunity in Education
1025 Vermont Avenue, NW, Suite 900
Washington, DC 20005
Phone: 202–347–7430
Fax: 202–347–0786
E-mail: clearinghouse@hqcoe.org
Web: http://www.trioprograms.org

The Council for Opportunity in Education is a nonprofit organization dedicated to furthering the expansion of educational opportunities throughout the United States. The council works in conjunction with colleges, universities, and agencies that host TRIO programs to help low-income Americans enter college and go on to graduate school. Information about the council's projects, programs, and special initiatives is available on its Web site. For more information about TRIO, see Federal TRIO Programs on this page and National TRIO Clearinghouse on page 34.

Counseling Resources
Web: http://www.cybercom.com/~chuck/guide.html#B

This Web site supplies numerous links to counseling and guidance resources for families, teachers, counselors, and administrators. Practitioners will find dozens of links to professional organizations and discussion groups. Students will find free tools to help prepare for college entrance examinations, including math and verbal lessons with more than 700 practice problems; study skills tips; career guides, including tests to help students find suitable careers; and a wide range of links to college information, including a historically black colleges and universities Web site. The information for parents ranges from parenting tips to information about the needs of teenagers and a handbook called *Preparing Your Child for College: A Resource Book for Parents*.

The Education Resources Institute (TERI)
330 Stuart Street, Suite 500
Boston, MA 02116
Toll Free: 800–255–TERI (8374)
Phone: 617–426–0681
Fax: 888–FAX–TERI (329–8374)
E-mail: custserv@teri.org
Web: http://www.teri.org

TERI provides loans based on creditworthiness to help youth attend college. TERI's Web site offers financial aid information and resources for administrators, parents, and students. TERI also sponsors the Higher Education Information Center (HEIC), which provides information on more than 175 programs and resources that can help students find careers, education programs, and financial aid.

Federal TRIO Programs
U.S. Department of Education
Higher Education Programs
1990 K Street, NW, Seventh Floor
Washington, DC 20006–8510
Phone: 202–502–7600
Fax: 202–502–7857
E-mail: OPE_TRIO@ed.gov
Web: http://www.ed.gov/offices/OPE/HEP/trio

The Federal TRIO Programs administer eight outreach and support programs (known collectively as the Federal TRIO programs) that help disadvantaged students progress from middle school to graduate school. TRIO grants are awarded to institutions of higher education, public and private agencies and organizations, and, in exceptional cases, secondary schools. The Federal TRIO Programs Web site provides reference information, application materials, and information about TRIO grants and funding. For more information about TRIO, see Council for Opportunity in Education on this page and National TRIO Clearinghouse on page 34.

BEST COPY AVAILABLE

Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP)
U.S. Department of Education
Office of Postsecondary Education
1990 K Street, NW
Washington, DC 20006–8524
Phone: 202–502–7676
Fax: 202–502–7675
E-mail: gearup@ed.gov
Web: http://www.ed.gov/gearup

GEAR UP is a competitive grant program that encourages young people to have high expectations, stay in school, study hard, and go to college. It awards multiyear grants to locally designed partnerships between colleges and middle schools serving low-income students—partnerships must include at least two other partners, such as community organizations, businesses, religious groups, state education agencies, parent groups, or nonprofits—to increase college attendance rates among low-income youth. GEAR UP's Web site provides resources for planning GEAR UP projects, information about grants and funding, and an application package.

Hispanic Scholarship Fund (HSF)
One Sansome Street, Suite 1000
San Francisco, CA 94104
Toll Free: 877–HSF–INFO (473–4636)
Phone: 415–445–9930
Fax: 415–445–9942
E-mail: info@hsf.net
Web: http://www.hsf.net

HSF is America's largest provider of scholarships to Hispanics. It has awarded more than 40,000 scholarships totaling nearly $47 million since it was established in 1975. Highlights of HSF's Web site include explanations—written for both adults and middle/high school students—of why college is important; advice for parents on how to prepare their children for college, starting in elementary school; and a wealth of materials on applying for college and choosing the right college. The Web site also provides the most extensive free list of scholarships for Hispanic students available. Although the site is geared primarily toward Hispanic families and first-generation college students, much of the information will be of interest to all prospective college students.

"I Have a Dream"® (IHAD) Foundation
National Office
330 Seventh Avenue, 20th Floor
New York, NY 10001
Phone: 212–293–5480, ext. 19
Fax: 212–293–5478
E-mail: info@ihad.org
Web: http://www.ihad.org

IHAD is a nationwide network of projects dedicated to keeping at-risk children in school. IHAD projects help children from low-income areas become productive citizens by providing them with a long-term program of mentoring, tutoring, and enrichment and by offering them financial support for postsecondary education. IHAD's Web site describes IHAD projects and their locations and provides links to related resources.

National College Access Network (NCAN)
Collegebound Foundation
204 East Lombard Street, Suite E-1
Baltimore, MD 21202
Phone: 410–244–7218
Fax: 410–727–5786
E-mail: ncan@erols.com
Web: http://www.collegeaccess.org

NCAN is a national federation of college-access programs. NCAN programs offer school-based advising to students and award "last dollar" scholarships that close the gap between regular financial aid and the real cost of attending college. NCAN's Web site offers links to NCAN programs, information about upcoming events for program professionals, financial aid links, and higher education links.

National TRIO Clearinghouse
Council for Opportunity in Education
1025 Vermont Avenue, NW, Suite 900
Washington, DC 20005
Phone: 202–347–2218
Fax: 202–347–0786
E-mail: clearinghouse@hqcoe.org
Web: http://www.trioprograms.org/clearinghouse

An Adjunct ERIC Clearinghouse (sponsored by the U.S. Department of Education), the National TRIO Clearinghouse collects and disseminates information about TRIO programs, including Talent Search, Upward Bound, Upward Bound Math/Science, Veterans Upward Bound, Student Support Services, Educational Opportunity Centers, and Ronald E. McNair Postbaccalaureate Achievement. The clearinghouse focuses on issues of education opportunity and access to higher education for low-income, first-generation students and students with disabilities. The clearinghouse's Web site provides detailed information about each of the TRIO programs and resources to help organizations obtain TRIO grants. For more information about TRIO, see Council for Opportunity in Education on page 33 and Federal TRIO Programs on page 33.

Partnership for Family Involvement in Education (PFIE)
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202–8173
Toll Free: 800–USA–LEARN (872–5327)
E-mail: partner@ed.gov
Web: http://pfie.ed.gov

PFIE is a partnership of more than 6,000 members of school, business, religious, and community organizations that work together to (1) help families become more involved in their children's learning at school and at home and (2) develop family-school-community partnerships to strengthen schools and improve student achievement. PFIE successes include supporting student- and family-friendly policies at the workplace, before- and afterschool programs, and tutoring and mentoring initiatives and providing financial support for facilities and technologies. PFIE's Web site offers the full text of numerous publications concerning family and community involvement in children's education.

Peterson's Thomson Learning
2000 Lenox Drive
P.O. Box 67005
Lawrenceville, NJ 08648
Toll Free: 800–338–3282
Phone: 609–896–1800
Fax: 609–896–1811
E-mail: info@petersons.com
Web: http://www.petersons.com

Peterson's has been well known for providing education resources since it was founded in 1966. Its Web site provides information about traditional universities and a variety of opportunities that are available to students: distance education, study-abroad programs, summer programs, and vocational education. The site also contains college-search materials and tips to help students prepare for college entrance examinations.

Think College Early
U.S. Department of Education
Office of Postsecondary Education
Quality Improvement and Strategic Planning
Seventh and D Streets, SW
Washington, DC 20202
Toll Free: 800–USA–LEARN (872–5327)
E-mail: thinkcollege@ed.gov; ope_www@ed.gov
Web: http://www.ed.gov/offices/OPE/thinkcollege/early

The U.S. Department of Education (ED) created the Think College Early program to provide information on educational opportunities beyond high school for learners of all ages. Aimed at an appropriate level for young adults (for example, it defines terms like *bachelor's degree* and *associates degree*), Think College Early's Web site features a list of courses that middle school students need to take to prepare for college; links to other ED college preparation resources; and a "toolbox" with parents' guides, academic resources, financial aid guides and forms, and college-planning calculators.

United Negro College Fund (UNCF)
8260 Willow Oaks Corporate Drive
Fairfax, VA 22031
Toll Free: 800–331–2244
Phone: 703–205–3400
Fax: 703–205–3550
E-mail: info@uncf.org
Web: http://www.uncf.org

UNCF is the nation's oldest and most successful African-American higher education assistance organization. It is a consortium of 39 private, accredited, four-year historically black colleges and universities. In addition to providing millions of dollars in scholarships each year to students at consortium universities, UNCF administers the new Gates Millennium Scholars program, a billion-dollar program that provides scholarships and fellowships for outstanding, low-income African-American, Native-American, Hispanic-American, and Asian-American students. UNCF's Web site lists scholarships available to students attending historically black colleges and universities.

ERIC Resources

ERIC is a national information system designed to provide users with ready access to an extensive body of education-related literature. Established in 1966, it is supported by the U.S. Department of Education's Office of Educational Research and Improvement and the National Library of Education. For more information about ERIC, contact ACCESS ERIC—the reference and referral component of the ERIC system—at 1–800–LET–ERIC (538–3742) or visit ACCESS ERIC's Web site at http://www.accesseric.org. Several components of the ERIC system provide resources specifically related to early intervention and college preparation; these are listed below.

ERIC Clearinghouse on Higher Education
George Washington University
Graduate School of Education and Human Development
One Dupont Circle, NW, Suite 630
Washington, DC 20036–1183
Toll Free: 800–773–ERIC (3742)
Phone: 202–296–2597
Fax: 202–452–1844
E-mail: lcavell@eric-he.edu
Web: http://www.eriche.org

This ERIC Clearinghouse concentrates on postsecondary education leading to four-year, master's, or professional degrees. It covers topics related to students, faculty, graduate and professional education, legal issues, financing, planning and evaluation, curriculum, teaching methods, and state-federal institutions. It also produces many publications about early intervention and college preparation; titles include *Early Intervention Program and College Partnerships. Summer Bridge Programs: Supporting All Students*, and *Helping Minority Students Graduate From College—A Comprehensive Approach*. The full texts of these and other publications are available on the clearinghouse's Web site. The clearinghouse also offers assistance in searching the ERIC database for additional publications related to early intervention, college preparation, and related topics.

(continued on page 36)

ERIC Resources (continued)

Adjunct ERIC Clearinghouse on Educational Opportunity
National TRIO Clearinghouse
Council for Opportunity in Education
1025 Vermont Avenue, NW, Suite 900
Washington, DC 20005
Phone: 202–347–2218
Fax: 202–347–0786
E-mail: clearinghouse@hqcoe.org
Web: http://www.trioprograms.org/clearinghouse

This Adjunct ERIC Clearinghouse focuses on issues of educational opportunity and access to higher education for low-income, first-generation students and students with disabilities. Publications related to early intervention that are available in full text on its Web site include *Retaining First-Generation and Low-Income Students, Understanding the Law To Give Students With Disabilities Full Potential,* and *Partnerships With Families Promote TRIO Student Achievement.* The clearinghouse serves educators and researchers in many ways; contact the clearinghouse for additional information about its services.

ERIC Clearinghouse on Adult, Career, and Vocational Education
Ohio State University
Center on Education and Training for Employment
1900 Kenny Road
Columbus, OH 43210–1090
Toll Free: 800–848–4815, ext. 2–7069
Phone: 614–292–7069
TTY/TDD: 614–688–8734
Fax: 614–292–1260
E-mail: ericacve@postbox.acs.ohio-state.edu
Web: http://ericacve.org

This ERIC Clearinghouse covers career education for all ages and populations; vocational and technical education for secondary, postsecondary, and adult populations; and other topics concerning adult education. Its Web site contains the full text of many publications related to early intervention, including *Self-Efficacy Beliefs and Career Development, What's Happening in School-to-Work Programs?* and *Work-Based Learning.* The clearinghouse also offers information about technical and vocational preparation programs and strategies as well as assistance in searching the ERIC database for career education literature; contact the clearinghouse for more details.

ERIC Clearinghouse on Counseling and Student Services
University of North Carolina at Greensboro
School of Education
201 Ferguson Building
P.O. Box 26171
Greensboro, NC 27402–6171
Toll Free: 800–414–9769
Phone: 336–334–4114
Fax: 336–334–4116
E-mail: ericcass@uncg.edu
Web: http://ericcass.uncg.edu

This ERIC Clearinghouse provides information on school counseling and social work; mental health, marriage, family, and career counseling; and student development. Its Web site contains the full text of many publications related to early intervention, including *Improving Academic Achievement: What School Counselors Can Do, Working With Resistant Clients in Career Counseling,* and *Assessing Career Certainty and Choice Status.* The site also has a virtual library with additional full-text documents related to career development, student achievement, cultural diversity, and other topics. Contact the clearinghouse for assistance in searching the ERIC database for additional literature concerning counseling and student services.

BEST COPY AVAILABLE

ED Pubs

The U.S. Department of Education (ED) has published many excellent publications about early intervention and college preparation that are available from ED's Publications Center (ED Pubs). Related publications include *Toward Resiliency: At-Risk Students Who Make It to College*, a study that uses National Center for Education Statistics data from 1997 and 1998 to examine the factors that contribute to moderate- to high-risk students' enrollment and persistence in higher education. *Toward Resiliency* is available in full text online at http://www.ed.gov/pubs/Resiliency. In addition, *Preparing Your Child for College: A Resource Book for Parents* describes for parents the types of courses that middle and high school students should take and when to take them, how to work with teachers and school counselors to choose colleges, and how to plan financially for the costs of college. *Preparing Your Child for College* is available in full text online at http://www.ed.gov/pubs/Prepare.

Many ED publications are available in full text on the Web; for other publications concerning early intervention and college preparation, see the ED Pubs Online Ordering System at http://www.ed.gov/pubs/edpubs.html. For example, the fall and winter 1999 issues of the journal *Advances in Education Research* showcase research about early intervention programs; the journal is not available online but can be ordered from ED Pubs.

Administrators of early intervention programs can obtain grant applications for ED-sponsored programs (like GEAR UP) from ED Pubs. Many of these applications are available in full text online on the ED Web site (http://www.ed.gov). Print copies can be ordered by calling ED Pubs toll free at 1–877–4ED–Pubs (433–7827).

Searching the ERIC Database on Early Intervention Topics

Patricia Wood

The ERIC database is the world's largest education database and an excellent resource for anyone seeking information on early intervention programs and related topics. ERIC maintains abstracts of more than 1 million research reports, curriculum and teaching guides, conference papers, and journal articles dating from 1966. You can perform free searches of the ERIC database through the ERIC systemwide Web site at http://www.accesseric.org or through print indexes and CD-ROMs at hundreds of libraries, college and university campuses, and state and local education offices.

When you conduct a search on a specific topic, you will get an annotated bibliography of related journal and document literature. You can then select the titles of interest and read the accompanying abstracts. To get the full text of a journal article (shown as EJ followed by six digits), you can visit a college or university library or a large public library that subscribes to the journal; ask your local library to obtain a copy of the journal issue through interlibrary loan; or contact a journal article reprint service, such as The UnCover Company (1–800–787–7979; http://uncweb.carl.org) or the Institute for Scientific Information (1–800–336–4474; http://www.isinet.com).

To get the full text of an ERIC document (shown as ED followed by six digits), visit one of the more than 1,000 organizations around the world that maintain an ERIC microfiche collection. To find the ERIC microfiche collection nearest you, call ACCESS ERIC at 1–800–538–3742. You can also order a print copy of many ERIC documents from the ERIC Document Reproduction Service (EDRS) by calling 1–800–443–3742. In addition, many documents published after 1992 can be ordered and delivered online from EDRS via the Web site at http://www.edrs.com.

Each entry in the ERIC database is indexed with *descriptors and identifiers*—special ERIC index terms that describe the most important concepts contained in a journal article or document. You can search the database using regular words and phrases, but your search will be far more effective if you use ERIC terminology.

Patricia Wood is Associate Director of the ERIC Clearinghouse on Higher Education at The George Washington University in Washington, DC.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

The ERIC Clearinghouse on Higher Education offers a free online tutorial, "Searching ERIC on the Internet," at http://www.eriche.org/Workshops/searching2.html. Module 6 of the tutorial discusses the difference between descriptors and identifiers and shows how to search each type of index term.

When searching the database for information on early intervention programs in higher education, you may want to start by using the following descriptors in conjunction with the descriptor *Higher Education*:

- *Access to Education*
- *Disadvantaged Youth*
- *Early Intervention*
- *Educationally Disadvantaged*
- *High Risk Students*
- *Minority Groups*
- *Outreach Programs*

Related terms called identifiers can also be useful when searching the database for information about early intervention programs. You may find the following identifiers helpful:

- *Educational Opportunities Programs*
- *Educational Opportunity Centers*
- *EQUITY 2000*
- *I Have A Dream Program*
- *Talent Search*
- *TRIO Programs*[1]
- *Upward Bound*

If you require assistance in searching the ERIC database for early intervention program information, call the ERIC Clearinghouse on Higher Education at 1–800–773–3742, ext. 26.

If you search the database extensively on a regular basis, you may find the *Thesaurus of ERIC Descriptors* and the *ERIC Identifier Authority List* helpful. Paper copies of both books are available from Oryx Press (1–800–279–6799; http://www.oryxpress.com) and at many places that offer access to the ERIC database. For general information about accessing the database or for a free copy of *All About ERIC*, call ACCESS ERIC at 1–800–LET–ERIC (538–3742).

Note

[1] Work has begun on converting this term to a descriptor. If your search for *TRIO programs* as an identifier yields nothing, use the term as a descriptor.

© 2000 PhotoDisc, Inc.

Putting It All Together: An Action Plan

Adrianna Kezar

The articles in this publication highlight the important role that early intervention plays in making higher education accessible to all students, especially those who are traditionally underrepresented or at risk. The following action plan offers steps that educators, parents, and community leaders can take to expand access to higher education for all children and that students can take to help themselves fulfill their aspirations for postsecondary education.

Educators

- As early as elementary school, start raising students' expectations for attending college. Help students understand as early as possible what it takes to go to college and how they can begin to prepare. Encourage them to take challenging academic courses, and teach them good study habits.
- Become a mentor. Help guide students, and assist them in discovering their interests and in pursuing their aspirations.
- Encourage student involvement in school and community activities. Explain to students which skills they can develop through participation in extracurricular activities and why these skills are important.
- Help students understand that financial aid is available for most college preparatory programs and also for college. Disseminate information about scholarships to students.
- Bring professionals from various fields into the classroom to talk to students about career and college opportunities.
- Identify students' academic needs and interests, and help them find the right college preparatory program and/or college. When assisting students, consider eligibility criteria, location, program cost and duration, program goals, schedules, results, staff composition, housing arrangements, student body size, available counseling resources, and rules and expectations. Encourage students to make appointments to visit the programs and/or colleges they are interested in.

© 2000 PhotoDisc, Inc.

- Help students complete admissions and other applications for college preparatory programs and colleges. Help them with their personal statements and/or essays. Follow through with them to make sure they submit their applications on time.
- Provide information to parents about college preparation, colleges, and financial assistance.

Adrianna Kezar is Director of the ERIC Clearinghouse on Higher Education at The George Washington University in Washington, DC.

Parents

- Realize that you are the most important asset to your children's success. Show interest in their advanced education, and have high expectations of them. Give them the support they need to succeed.
- Start saving early for your children's college education. Ask your children's school guidance counselor for resources that can help you learn more about saving for college and applying for financial aid.
- Make sure your children are enrolled in a rigorous curriculum. Meet with your children's school guidance counselor to discuss your children's course schedule and their future plans.
- Learn about the availability of early intervention programs and other college preparatory resources in your community.
- Help your children with their homework, and hold them accountable for completing it.
- Enforce limits on watching television and on other activities (such as playing computer games) that can interfere with homework.
- Encourage your children to plan for their future, and help them take concrete steps to achieve their goals. Help them keep track of the deadlines they have to meet.

Community Leaders

- Collaborate with all stakeholders in the community to discuss the needs of local children.
- Establish partnerships with local schools, colleges and universities, foundations, businesses, and other organizations to develop an early intervention program that meets the needs of your community.
- Implement clear principles and practices to guide your partnership and program. In addition, research

© 2000 PhotoDisc, Inc.

student needs and best practices, hold students accountable, use the latest technology, and network with colleagues.

- Keep abreast of research on early intervention programs, and conduct an ongoing evaluation of your program.
- Advocate for local youth by developing a scholarship program. Actively participate in fund-raising.

Students

- Make sure you are enrolled in a rigorous curriculum. Meet with your school guidance counselor to discuss your course schedule and your future plans.
- Don't be afraid to ask questions. Because not all early intervention programs are for everyone, find a program that matches your goals and interests. You are more likely to succeed if you know what to expect from a program ahead of time.
- Keep a calendar to make sure you meet all deadlines for applications to early intervention programs and for assignments once you are in a program.
- Participate in as many extracurricular activities as possible. Participation will help you get the most out of school and will increase your chances of college acceptance.
- Find part-time jobs or internships that further your education and career aspirations. Remember that when you are a student, your education should always come first; your job should supplement your education and should never distract you from it.
- Keep a positive attitude, and stay focused on your goals.
- Ask for and take the advice of older students who have made it to and/or succeeded in college. If you don't know anyone in college, ask your school guidance counselor if he or she can recommend someone who would be willing to talk to you.
- Develop a timeline for college planning, visit campuses, and carefully review your options for college. Discuss your options with your parents, siblings, relatives, teachers, guidance counselors, and others whose opinions you respect.

© 2000 PhotoDisc, Inc.

ERIC Directory

Educational Resources Information Center (ERIC)
National Library of Education
Office of Educational Research and Improvement (OERI)
U.S. Department of Education
Toll Free: (800) 424–1616
TTY/TDD: (800) 437–0833
Web: http://www.accesseric.org

Clearinghouses

Adult, Career, and Vocational Education
Ohio State University
Toll Free: (800) 848–4815, ext. 2–7069
Phone: (614) 292–7069
TTY/TDD: (614) 688–8734
Web: http://ericacve.org

Assessment and Evaluation
University of Maryland, College Park
Toll Free: (800) GO4–ERIC (464–3742)
Phone: (301) 405–7449
Web: http://ericae.net

Community Colleges
University of California at Los Angeles
Toll Free: (800) 832–8256
Phone: (310) 825–3931
Web: http://www.gseis.ucla.edu/ERIC/eric.html

Counseling and Student Services
University of North Carolina at Greensboro
Toll Free: (800) 414–9769
Phone: (336) 334–4114
Web: http://ericcass.uncg.edu

Disabilities and Gifted Education
Council for Exceptional Children
Toll Free: (800) 328–0272
Phone: (703) 264–9475
TTY/TDD: (800) 328–0272
Web: http://ericec.org

Educational Management
University of Oregon
Toll Free: (800) 438–8841
Phone: (541) 346–5043
Web: http://eric.uoregon.edu

Elementary and Early Childhood Education
University of Illinois at Urbana–Champaign
Toll Free: (800) 583–4135
Phone: (217) 333–1386
TTY/TDD: (800) 583–4135
Web: http://ericeece.org
National Parent Information Network Web: http://npin.org

Higher Education
George Washington University
Toll Free: (800) 773–ERIC (3742)
Phone: (202) 296–2597
Web: http://www.eriche.org

Information & Technology
Syracuse University
Toll Free: (800) 464–9107
Phone: (315) 443–3640
Web: http://ericir.syr.edu/ithome
AskERIC Web: http://www.askeric.org

Languages and Linguistics
Center for Applied Linguistics
Toll Free: (800) 276–9834
Phone: (202) 362–0700
Web: http://www.cal.org/ericcll

Reading, English, and Communication
Indiana University
Toll Free: (800) 759–4723
Phone: (812) 855–5847
Web: http://www.indiana.edu/~eric_rec

Rural Education and Small Schools
AEL, Inc.
Toll Free: (800) 624–9120
Phone: (304) 347–0400
TTY/TDD: (304) 347–0448
Web: http://www.ael.org/eric

Science, Mathematics, and Environmental Education
Ohio State University
Toll Free: (800) 276–0462
Phone: (614) 292–6717
Web: http://www.ericse.org

Social Studies/Social Science Education
Indiana University
Toll Free: (800) 266–3815
Phone: (812) 855–3838
Web: http://www.indiana.edu/~ssdc/eric_chess.htm

Teaching and Teacher Education
American Association of Colleges for Teacher Education
Toll Free: (800) 822–9229
Phone: (202) 293–2450
Web: http://www.ericsp.org

Urban Education
Teachers College, Columbia University
Toll Free: (800) 601–4868
Phone: (212) 678–3433
Web: http://eric-web.tc.columbia.edu

Adjunct Clearinghouses

Child Care
National Child Care Information Center
Toll Free: (800) 616–2242
TTY/TDD: (800) 516–2242
Web: http://nccic.org

Clinical Schools
American Association of Colleges for Teacher Education
Toll Free: (800) 822–9229
Phone: (202) 293–2450
Web: http://www.aacte.org/pds.html

Educational Opportunity
National TRIO Clearinghouse
Council for Opportunity in Education
Phone: (202) 347–2218
Web: http://www.trioprograms.org/clearinghouse

Entrepreneurship Education
Center for Entrepreneurial Leadership
Toll Free: (888) 4–CELCEE (423–5233)
Phone: (310) 206–9549
Web: http://www.celcee.edu

ESL Literacy Education
National Clearinghouse for ESL Literacy Education
Center for Applied Linguistics
Phone: (202) 362–0700, ext. 200
Web: http://www.cal.org/ncle

International Civic Education
Indiana University
Toll Free: (800) 266–3815
Phone: (812) 855–3838

Service Learning
University of Minnesota
Toll Free: (800) 808–SERVe (7378)
Phone: (612) 625–6276
Web: http://umn.edu/~serve

Test Collection
Educational Testing Service
Phone: (609) 734–5689
Web: http://ericae.net/testcol.htm

U.S.–Japan Studies
Indiana University
Toll Free: (800) 266–3815
Phone: (812) 855–3838
Web: http://www.indiana.edu/~japan

Affiliate Clearinghouse

National Clearinghouse for Educational Facilities
National Institute of Building Sciences
Toll Free: (888) 552–0624
Phone: (202) 289–7800
Web: http://www.edfacilities.org

Support Components

ACCESS ERIC
Toll Free: (800) LET–ERIC (538–3742)
Phone: (301) 519–5157
Web: http://www.accesseric.org

ERIC Document Reproduction Service (EDRS)
DynEDRS, Inc.
Toll Free: (800) 443–ERIC (3742)
Phone: (703) 440–1400
Web: http://www.edrs.com

ERIC Processing and Reference Facility
Computer Sciences Corporation
Toll Free: (800) 799–ERIC (3742)
Phone: (301) 552–4200
Web: http://ericfac.piccard.csc.com

BEST COPY AVAILABLE

United States
Department of Education
ED Pubs
8242–B Sandy Court
Jessup, MD 20794–1398

Official Business
Penalty for Private Use, $300

Postage and Fees Paid
U.S. Department of Education
Permit No. G–17

Standard Mail (A)

NLE 2001–4405

BEST COPY AVAILABLE